

Central Internet Database Requirements

Version 4.0

April 17, 2000

U.S. Department of Energy



Central Internet Database Requirements

Table of Contents

1. Overview	1
1.1 Purpose of the Document	1
1.2 Scope	1
1.3 Background	1
2. Requirements Definition Process	3
2.1 General Data Requirements	3
2.2 General Functional Requirements	4
2.3 Stakeholder Forum Feedback	4
3. CID Operations	5
4. Requirements	7
4.1 Input and Output Requirements	7
4.1.1 Inputs	8
4.1.2 Outputs	12
4.2 Data Requirements	13
4.2.1 Data Requirements	13
4.2.2 Data Model	15
4.3 Functional Requirements	18
4.4 Technical Requirements	28
5. System Architecture	30
5.1 System Security Requirements	31
5.2 Backup and Recovery Requirements	32
5.3 User Support Approach	32
6. Assumptions and Issues	33
6.1 Assumptions and Constraints	33
6.2 Issues	34
 Appendix A - Web Sites Analyzed for Central Internet Database Capabilities	 A1
Appendix B - Central Internet Database Data Dictionary	B1
Appendix C - List of Web Sites to be Linked to the Central Internet Database	C1
Addendum - Release 3 Addendum, Analysis of Baselined Requirements	Add1

Central Internet Database Requirements List of Tables

Table 1 - CID Input Requirements	10
Table 2 - CID Output Requirements	12
Table 3 - CID General Data Requirements	13
Table 4 - CID Functional Requirements	18
Table 5 - CID Technical Requirements	28
Table 6 - CID Project Issues	34

Central Internet Database Requirements List of Figures

Figure 1 - Concept of Operations Diagram	5
Figure 2 - Data Model Relationship Types	16
Figure 3 - CID Logical Database Model	17
Figure 4 - Central Internet Database Architecture	30

1. Overview

1.1 Purpose of the Document

This document describes the requirements for the implementation of a database and a web-based report and query application for the U.S. Department of Energy (DOE). The project, named the Central Internet Database (CID) - Version 1.0, has (as of the publication of this document) undergone three complete releases. Release 3 marks the completion of CID Version 1.0. This document outlines the requirements and specifications implemented in CID Version 1.0 - Release 3. These requirements were baselined prior to the start of development on Version 1.0 of the CID. Any changes to the requirements presented in this document have been subject to change control procedures and approval by the Configuration Control Board (see the Central Internet Database Project Plan, June 30, 1999, for more details on the change control process). The addendum included in this document identifies any deviation between the implemented system and the baselined requirements and offers an explanation for each deviation.

1.2 Scope

This document contains requirements for the implementation of the Central Internet Database, including the following information:

- Background and purpose of the project;
- Description of system inputs and outputs;
- Data requirements;
- Functional requirements;
- Technical requirements;
- System architecture; and
- Discussion of assumptions and issues (as of date of publication).

The requirements defined in this document have been used as the basis to implement the CID. They have been used in the detailed design of the CID web software, including specifications for reports that are produced through the CID web application.

1.3 Background

In June 1989, the Natural Resources Defense Council, Inc. (NRDC) and other organizations filed suit against then DOE Secretary James Watkins over the Department's failure to prepare a Programmatic Environmental Impact Statement (PEIS) regarding its environmental management and weapons modernization activities. In October 1990, a settlement was reached that called for the development of two PEISs: one covering the nuclear weapons complex's future configuration and the other covering the Environmental Restoration and Waste Management (ER/WM) Program.

In 1995, DOE modified the scope of the ER/WM PEIS to exclude environmental restoration activities. In 1997, the NRDC, acting on behalf of itself and 38 non-governmental groups, filed suit against DOE and several DOE officials. The suit alleged that DOE had violated the 1990 consent order by failing to prepare a PEIS for the Department's ER/WM Program, and that this inaction constituted a contempt of court. On December 12, 1998, DOE and NRDC reconciled the suit through an official settlement agreement.

The PEIS Settlement Agreement reached by NRDC and DOE avoided further litigation by mandating that DOE take defined actions to enhance public understanding of the multi-billion dollar cleanup of its nuclear weapons complex. One of the DOE actions specified in the agreement is the development and deployment of a database that integrates existing information on Departmental waste, facilities, and contaminated media. The database must be made available to the public via the Internet through a web-based reporting tool.^{1,2}

In January 1999, DOE began reviewing and analyzing its existing data sources and assembled a project team to implement the design of this system. The project approach, tasks, and schedule are documented in the *Central Internet Database: Detailed Project Plan, June 30, 1999*.

¹ Natural Resources Defense Council et al., v. Richardson, Civ. No. 97-9369 (SS).

² *Federal Register*, Volume 64, Number 77, April 22, 1999, p. 19753.

2. Requirements Definition Process

2.1 General Data Requirements

Five general categories of information are requested in Section II.A. of the PEIS Settlement Agreement:

- Data on contaminated media, contaminated facilities, and waste controlled by DOE's Office of Environmental Management (EM).
- Data on contaminated media, contaminated facilities, and waste controlled by DOE's Offices of Defense Programs (DP), Science (SC), and Nuclear Energy (NE).
- Data on DOE-managed, domestic, and foreign research reactor spent nuclear fuel, excluding spent nuclear fuel from commercial reactors.
- Data on sites governed by Section 151(b) of the Nuclear Waste Policy Act (NWPA), upon transfer of those sites to DOE ownership.
- Data on sites managed as part of the Formerly Utilized Sites Remedial Action Program (FUSRAP), if they have been returned to DOE ownership.

In addition to these five categories, Section II.D. of the Settlement Agreement specifically requests information from three other sources: the 1996 DOE Report entitled ***Taking Stock: A Look at the Opportunities and Challenges Posed by Inventories from the Cold War Era*** (Materials in Inventory or MIN Report), the ***Annual Report of Waste Generation and Pollution Prevention*** (Waste Generation Report), and the ***Annual Toxic Chemical Release Inventory*** (TRI).

Section II.D. of the Settlement Agreement requires the requested data be included in the CID to the extent that:

- They are available and currently collected, or are planned to be collected in the future, by DOE on a national level; and,
- They are not considered classified, controlled, or proprietary information.

The Settlement Agreement provides very specific details on the types of information that the database should include. The complete list is presented in Section 4.2 - Data Requirements. DOE used the general requirements described above as the basis for an initial review of its current database systems to determine potential sources of information for the CID. The data sources that will supply information to the CID are described in Section 4.1- Input and Output Requirements.

2.2 General Functional Requirements

Section II.C. of the Settlement Agreement provides guidelines for the capabilities of the software used to access the CID:

- The CID must be available to the public through the Internet.
- The CID must be available through a web-based reporting tool.
- The reporting tool will provide the capability to generate standard reports.
- The reporting tool will provide the capability to perform searches and queries.
- Hard copy distribution of reports based on written requests must be available to individuals and organizations that do not have computer access to the database.
- The CID web site will include linkages to other web sites and databases (internal and external to DOE) that would enhance the usefulness of the CID.

DOE used these guidelines as the basis for developing the CID Functional Requirements. DOE developed additional requirements through reviewing features and capabilities of similar web sites and through consultation with DOE subject matter experts. Appendix A contains a list of web sites that were reviewed to determine similar capabilities for the CID user interface. Section 4.3 - Functional Requirements details the functional capabilities that will be part of the CID user interface.

2.3 Stakeholder Forum Feedback

The PEIS Settlement Agreement requires that DOE host at least two Stakeholder Forums to address issues relating to the database. The first Stakeholder Forum was held on June 3-4, 1999, to review the proposed outline, structure, and linkages of the database with the plaintiffs, stakeholders, and other interested organizations. This forum provided an opportunity for potential users of the CID to comment on data requirements and to provide input on the capabilities of the web-based reporting tool, as well as the overall look and feel of the web user interface software.

The stakeholder feedback is presented in the *First National Stakeholder Forum Proceedings Document*, dated July 10, 1999.³ DOE has incorporated stakeholder requests for data or web reporting functionality into the document, where practical. Requests not selected for implementation in CID Version 1.0 were recorded as part of the proceedings and will be considered for future versions.

³ The full text of this document can be found on the PEIS Settlement News web site at <http://www.em.doe.gov/settlement>.

3. CID Operations

Figure 1 summarizes the overall design of the CID system and the flow of information in and out of the CID. Each letter on the diagram represents a key feature of the system that contributes to CID operations, as described below.

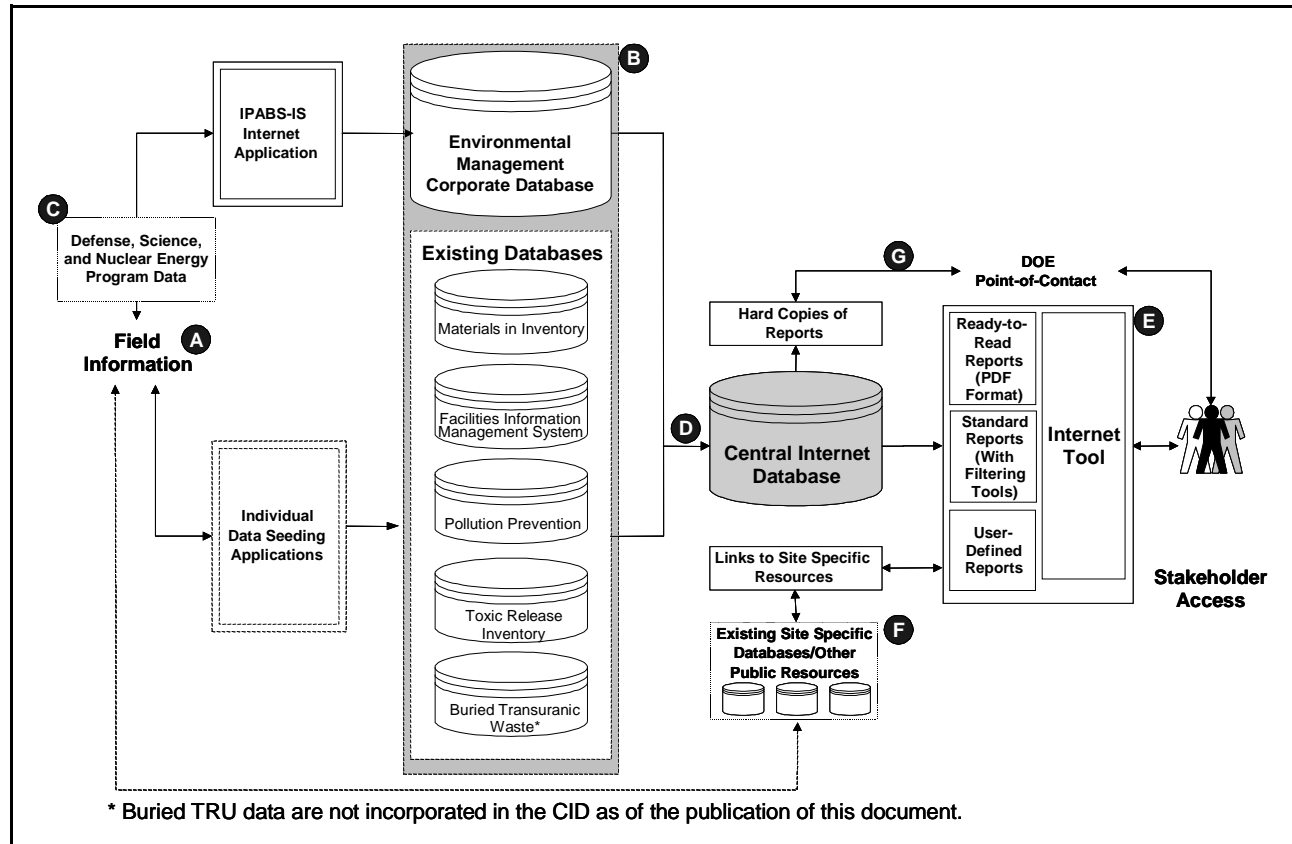


Figure 1: CID Operations Diagram

- A** DOE Field/Operations Offices supply information to existing national-level databases through a series of data collection efforts.
- B** Information collected from the field is stored in a variety of databases maintained by DOE Field and Headquarters Offices. The bulk of the data required by the PEIS Settlement Agreement is stored in the EM Corporate Database, but several other databases also supply information to fulfill the CID data requirements. Selected data from all of these databases constitute the major inputs required for the CID. These systems are described further in Section 4.1.1 - Inputs.
- C** Most of the waste data required by the PEIS Settlement Agreement is managed under the EM Program Office. The DP, SC, and NE programs are also responsible for some waste management activities. These programs have reviewed the waste data in the EM Corporate

Database to ensure that their waste quantities and activities are accurately captured. In addition, spent nuclear fuel data that is reported in the CID is received by the EM Corporate Database from the National Spent Fuel Database (NSFD), which is maintained by the Idaho National Engineering and Environmental Laboratory.

- D** Selected data from each of the source databases is extracted electronically and migrated to the CID. Extractions will occur at least annually and will be timed such that the information from the most recent source database updates will be captured. Owners of the source database have the opportunity to review and validate information prior to official release of the data through the CID web site. The specific data elements that are used in the CID are presented in the logical database model, which is provided in Section 4.2 - Data Requirements.
- E** The Internet tool allows users to access information in the CID through report and query capabilities. Specific capabilities of the web software and the report and query tool are described in Section 4.3 - Functional Requirements.
- F** The PEIS Settlement Agreement requires that DOE provide a number of “links” or electronic connections to internal and external resources on the web that could provide, supplement, or enhance CID information. Information from these resources is not integrated in any way with the CID data. Section 4.3 - Functional Requirements and Appendix C - List of Web Sites to be Linked to the Central Internet Database provide more details on CID links to other web resources.
- G** Reports are produced from the CID periodically (at least after each major database update) and made available to the public through the CID Support Desk and a DOE point-of-contact for those persons who do not have computer access to the CID. Section 4.3 - Functional Requirements contains more detail on hard copy report production and availability.

4. Requirements

This section consists of four subsections that describe the following types of requirements:

- Input and Output Requirements,
- Data Requirements,
- Functional Requirements, and
- Technical Requirements.

A table is included within each subsection that describes each requirement. Each requirement is assigned a unique alphanumeric code. The first two to four characters represent the requirement type (e.g., input requirements will be coded as “IN”) and are followed by a three-digit sequence number. This numbering system allows for tracking requirements through the specification, design, development, and testing phases of the SDLC and facilitates insertion or deletion of items as requirements are refined.

Each requirement is further classified into one of the following categories:

M Mandatory	The requirement is explicitly stated in the PEIS Settlement Agreement, and therefore, is considered an essential feature of the system.
R Required	The requirement is not explicitly stated in the PEIS Settlement Agreement but is required to support the overall design of the CID system.
O Optional	The requirement is a “nice-to-have” feature and could be omitted or postponed to a future release without affecting the viability of Release 1.0 of the CID.

4.1 Input and Output Requirements

For the purpose of this document, inputs are defined as those systems that need to interface with the CID, either electronically or manually (i.e., migration of data from source systems to the CID). Outputs are defined as items required to be generated from the CID (i.e., reports). The input requirements describe the nature and content of the inputs and other capabilities necessary to support the interfaces. The output requirements describe the nature and content of the CID reports and the capabilities necessary to support the production of these reports.

4.1.1 Inputs

Six existing DOE databases will be sources of data to the CID:

- **Office of Environmental Management (EM) Corporate Database.** The EM Corporate Database was constructed by DOE in 1998 to store data from EM Program activities in planning, budgeting, performance measurement, and project progress reporting. For the CID, the EM Corporate Database supplies most of the data requested for EM radioactive waste, contaminated media, spent nuclear fuel (SNF) for the EM program as well as the DP, SC, and NE programs. The EM Corporate Database receives details on fuel types, SNF reactors, and isotope and radioactivity data on spent nuclear fuel from the National Spent Fuel Database (NSFD), which is maintained by the Idaho National Engineering and Environmental Laboratory.
- **Facilities Information Management System (FIMS).** FIMS is DOE's corporate database for real property as required by Life Cycle Asset Management Order 430.1. FIMS is managed by the DOE Office of Contract and Resource Management. Real property includes land and anything permanently affixed to it, such as buildings, fences, and building fixtures (lights, plumbing, heating and air conditioning, etc). Buildings and other permanently affixed structures are generally referred to as "facilities". FIMS also provides information on contamination of facilities, including data on nuclear materials that are stored in buildings and other structures. The CID incorporates FIMS data on DOE buildings and other structures, including summary information on contamination present and nuclear materials stored in buildings or structures. The CID does not include records on DOE land holdings. For the CID, FIMS is the primary source of information on contaminated facilities.
- **Materials in Inventory (MIN) Database.** DOE developed the Materials in Inventory (MIN) Database to support the production of the 1996 report, *Taking Stock: A Look at the Opportunities and Challenges Posed by Inventories from the Cold War Era* (also referred to as the MIN Report). In this report, DOE defines materials in inventory as materials that are not currently in use, that have not been designated as waste, and that the Nuclear Weapons Council has not set aside for national defense purposes. The report characterizes ten categories of nuclear and non-nuclear materials and provides an analysis of the volumes, locations, chemical constituents, and management plans for these materials. Some information collected through the MIN Initiative is classified and is not included in the CID. No updates have occurred since the collection of this data for the 1996 report, and there are currently no plans to update this information. For the CID, the MIN Database is the primary source of information on excess fissile materials and other material inventories.
- **Pollution Prevention Database.** The Pollution Prevention Database supports the annual production of the *Waste Generation and Pollution Prevention Progress Report* (also referred to as the Waste Generation Report). The Pollution Prevention Program and database are administered through DOE's Office of Environmental Management, Office

of Pollution Prevention. The mission of the Pollution Prevention Program is to reduce, and where possible, eliminate the generation and release of DOE wastes and pollutants by implementing cost-effective pollution prevention techniques, practices, and policies. For the CID, the Pollution Prevention Database is the primary source for non-radioactive, hazardous waste and sanitary waste at DOE sites. Because the reporting criteria change from year to year, the number of DOE sites required to report data to this system for any given year may vary.

- **Toxic Release Inventory (TRI) Database.** The TRI database contains DOE submissions to the EPA in conformance with the requirements set forth in Section 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA). DOE sites prepare and submit an annual report, called the Form R, on each toxic chemical for which the site meets or exceeds the reporting threshold criteria. Information in the Form R includes routine and accidental releases of toxic chemicals into the air, water, and land as well as the amount contained in wastes treated, recycled, or burned for energy recovery on- and off-site.

The CID includes data submitted by DOE in Sections 5, 6 and 8 of the TRI annual submission forms (EPA Form R). Reporting years stored in the database are from 1993 to the most current submission. DOE's Office of Environment, Safety and Health (EH) maintains DOE's TRI database for tracking purposes. For more information on DOE's TRI reporting data, please visit the DOE Office of Environmental Policy and Guidance web site at http://www.eh.doe.gov/oepa/facility/tri/tri_data.htm.

- **Buried TRU Database.** The Buried TRU Database is a collection of data on transuranic (TRU) waste that DOE terms as "buried." Prior to 1970, waste that meets the current definition of TRU was managed in the same manner as low-level waste -- through disposal in shallow burial trenches or pits. Recognizing the need to provide greater isolation of TRU waste, shallow land burial of TRU waste was discontinued in 1970. The TRU wastes disposed of in shallow burial trenches or pits prior to 1970 have become known as "buried TRU." EM maintains and updates the Buried TRU Database through a series of survey forms completed by DOE sites. For the CID, the Buried TRU Database is the primary source for information on buried TRU waste. *Buried TRU data is currently being collected and is undergoing finalization and approval. It is not available in the CID Version 1.0.*

Table 1 details the input requirements for the CID.

Table 1 CID Input Requirements

Requirement Number	Requirement Statement	Category
IN-001	<p>Sources of data to the CID will be:</p> <ul style="list-style-type: none"> – EM Corporate Database – Facilities Information Management System (FIMS) – Materials in Inventory Database (MIN) – Pollution Prevention Database – Toxic Release Inventory (TRI) – Buried TRU Database <p>The portions of each database used for the CID will contain information that is relevant to the information requested in the PEIS Settlement Agreement.</p>	R
IN-002	Data included in the CID will be information that is collected, or planned to be collected in the future by DOE at a national level.	M
IN-003	DOE Field/Operations Offices will not be required to provide any additional data beyond that which is currently provided by existing source databases.	R
IN-004	Waste and contaminated media information from the DP, SC, and NE Programs will be provided to the CID through the EM Corporate Database (this is currently a proposal that has not yet been decided. See Section 6 - Assumptions and Issues).	O
IN-005	Whenever possible, the CID will be populated electronically through programs that will migrate the selected data items from the source data systems. If electronic migration is not possible, the CID will be populated through data entry directly into the CID tables.	R
IN-006	Updates to the CID from each data source will occur at least annually.	M
IN-007	Each update to the CID will provide a new set of records to the database to supplement the existing CID data. No data in the CID will be overwritten by subsequent updates.	R
IN-008	The EM Corporate Database will be the source of radioactive waste and contaminated media data, and SNF. Non-radioactive hazardous waste information will not be imported from the EM Corporate Database.	R

Requirement Number	Requirement Statement	Category
IN-009	The FIMS Database will be the source for contaminated facilities data for all required DOE programs.	R
IN-010	The MIN Database will provide data on excess fissile materials in inventory and other MIN categories for the 1996 reporting year only. The SNF inventories from MIN will not be migrated to the CID.	R
IN-011	The Pollution Prevention Database will only provide data on non-radioactive hazardous waste.	R
IN-012	DOE's Toxic Release Inventory (TRI) Database will provide data on sites reporting through EPA's TRI program on Toxic Chemical Releases. The TRI information included in the CID will be from Part I, Section 4, and Part II, Sections 1, 5, 6, and 8 of EPA's reporting Form R.	R
IN-013	The Buried TRU Database will provide data on sites that are currently managing buried TRU waste.	R
IN-014	For each category of information specified in the PEIS Settlement Agreement, the level and degree of detail of the data stored in the CID will vary, depending on the level and degree of detail of the data currently available and collected by DOE on an on-going basis.	M
IN-015	No information that is classified, unclassified controlled nuclear information (UCNI), operational security (OPSEC), or official use only (OUO) will be included in the CID.	M
IN-016	Waste and facilities managed through the Naval Nuclear Propulsion Program are not required to be included in the CID.	M
IN-017	Commercial reactor spent nuclear fuel data will not be included in the CID.	M
IN-018	There will be a data validation process to allow system owners 15 business days to review and validate data migrated to the CID prior to that data being released.	R
IN-019	During each migration, an automated process should detect structural changes in a source database prior to executing the migration program.	O
IN-020	The time and date of the last update of each record will be maintained in the CID database.	R

4.1.2 Outputs

Three types of outputs will be required from the CID system:

- **Ready-to-Read Reports.** This category includes “pre-generated” outputs, available in Portable Document Format (PDF), that summarize the CID data for the DOE Complex.
- **Standard Reports.** This category includes reports that are in a standard format, but allow the user to tailor the output through filtering to include or exclude particular records from the report format and by sorting the records to present a user-specified order.
- **User-Defined Reports.** This category allows the user to construct the content and format of a report from scratch by specifying data sets to be included, identifying columns of data to be included, and applying detailed filters and sorts.

Table 2 details the output requirements for the CID.

Table 2 CID Output Requirements

Requirement Number	Requirement Statement	Category
OUT-001	Outputs from the CID will be in the form of Ready-to-Read Reports, Standard Reports, and User-Defined Reports.	R
OUT-002	Based on written requests from the user community, a DOE point-of-contact will be responsible for producing hardcopy reports from the CID and making these reports available to those organizations and individuals who do not have computer access to the CID.	M
OUT-003	The system will provide five to ten Ready-to-Read Reports. These reports will be pre-generated from the CID and available only in PDF.	R
OUT-004	The system will have the ability to generate 20 to 30 Standard Reports. These reports will be available in PDF, HTML, and comma-delimited formats.	R
OUT-005	The system will support the generation of an unlimited number of User-Defined Reports. The output of user defined reports will be available in PDF, HTML, and comma-delimited formats.	R
OUT-006	The system will provide a process by which a user can obtain a complete copy of the CID structure and contents.	O

Requirement Number	Requirement Statement	Category
OUT-007	The system will provide an audit feature to track the number of times each Standard and Summary Report is executed.	R
OUT-008	The system will provide an audit feature to track the number of times specific data sets and data elements are selected when constructing user-defined reports.	O
OUT-009	The system will contain a function that tracks the number of users that access the site.	R

4.2 Data Requirements

The PEIS Settlement Agreement describes the types of data to be included in the CID. Analysis of each data source has identified supplemental requirements for data stored in the CID. Table 3 describes these requirements. This section also includes the logical database model for CID Release 3 (see Section 4.2.2 - Data Model). The logical database model depicts the basic structure of the database and the general relationship between the data elements that exist in the active CID data architecture. Definitions for each data element (organized alphabetically by table in the logical model) are provided in Appendix B - Central Internet Database Data Dictionary.

4.2.1 Data Requirements

Table 3 presents the data requirements for the CID.

Table 3 CID Data Requirements

Requirement Number	Requirement Statement	Category
DAT-001	The database will categorize waste and contaminated media by waste type (i.e., high-level waste, transuranic waste, low-level waste, and mixed low-level waste).	M
DAT-002	For contaminated facilities, the database will identify the facilities (name and location), and describe their use and status (operating or standby) and size (approximate square footage).	M
DAT-003	For each waste type, DOE will provide the location of site/radioactive material, i.e., the name of the DOE site (e.g., the Savannah River Site (SRS), the Pantex Plant (Pantex), the Idaho National Engineering and Environmental Laboratory (INEEL)) where the radioactive material is generated, stored, treated, or disposed.	M

Requirement Number	Requirement Statement	Category
DAT-004	For waste, DOE will categorize by waste type (i.e., high-level waste, transuranic waste, low-level waste, and mixed low-level waste) and provide information about the annual volumes (beginning with 1998), and the future projected volumes, of waste in storage, newly generated, treated, and disposed.	M
DAT-005	For contaminated environmental media, DOE will provide the estimated volume of the media.	M
DAT-006	For spent nuclear fuel, the database will provide the mass of spent nuclear fuel in storage and annual new receipts.	M
DAT-007	For contaminated facilities, the database will provide the approximate square footage of the facility, and identify whether any contamination is radioactive, chemical, or both.	M
DAT-008	For waste and contaminated environmental media, the database will identify the major chemical constituents of concern from a regulatory or programmatic perspective.	M
DAT-009	For waste, contaminated environmental media, and spent nuclear fuel, the database will identify the major radionuclides of concern from a regulatory or programmatic perspective and provide the total estimated curie content.	M
DAT-010	For each waste type, the database will provide information about the waste disposition path in terms of storage, treatment, and disposal, including site locations, to the extent that such information is collected by DOE. For waste transfers between DOE sites or to commercial facilities, the database will identify the shipping and receiving sites, and the annual volume of transferred waste (by waste type).	M
DAT-011	The database will provide information about the generator of waste, contaminated media, or spent nuclear fuel, by the DOE site (e.g., SRS, Pantex, INEEL) and the major program (i.e., the DOE EM, DP, SC, and NE Offices) that is responsible for its generation, to the extent such information is collected by DOE.	M
DAT-012	The database will minimize the use of codes from the source systems and will use proper names in place of codes, where practical.	R

Requirement Number	Requirement Statement	Category
DAT-013	The database will include separate tables or “views” of data, where practical, to facilitate production of Summary and Standard Reports when information requires a cross section of data from different tables in the database.	O

4.2.2 Data Model

The CID logical database model is presented in the form of an Entity-Relationship Diagram (ERD), which graphically depicts the data requirements, data elements, and dependencies among data. An ERD is a useful tool to logically group related pieces of data together to maintain proper relationships and associations among groups of data. With minimal training, an ERD can be a useful communication tool for users to visualize the structure and relationships applied in the database.

Different data modeling tools utilize different symbols for an ERD. The CID logical database model was developed using *ERwin*, Version 3.5.2. The following paragraphs describe the terminology and symbols *ERwin* employs and their use in interpreting the model.

Modeling Level: There are two ways of modeling for ERDs: the *logical level* and the *physical level*. The *logical level* depicts objects with natural language names that make sense to non-technical staff. There is no presentation of database terminology, indexing, and other technical considerations. The *physical level* is an expression of the logical model in technical terms, incorporating default data types, database naming conventions, and optimal data architecture for easy access to the data. The physical level model for the CID (presented in *Central Internet Database Report Specifications, Version 4.0*) was developed based on the general entities and relationships defined in the logical level model.

Entity: An entity is a person, place, thing, event, or concept of interest that has common attributes or characteristics. Data model entities are represented as *tables* in a database. Entities are typically named as a singular noun or noun phrase. Examples of CID entities from the logical model are “FIMS_TBL_PROPERTY” and “txFacility.” Each entity in the data model is accompanied by a specific definition. The rectangular figures on the ERD represent entities.

Attribute: An attribute is a specific piece of information or characteristic that is associated with an entity. Data model attributes are represented as *data elements* in a database. Examples of attributes are “Property Name” and “Inventory Amount.” An attribute may or may not be a *key* in an entity (see below). Each attribute in the data model is accompanied by a specific definition. The names within each rectangle on the ERD represent attributes.

Key: A key is an attribute or group of attributes that uniquely identifies a specific group of related information or *record* within each entity. Examples of *keys* in the CID logical database

model are “Waste Stream Code” and “Reactor ID.” The names above the line within each rectangle on the ERD represent keys.

Relationship: Relationships show how entities relate to one another and are defined based on the business needs to be supported. There are several relationship types depicted in the model as shown by the lines that connect one entity to another, using different symbols on either end of the line. To read a relationship, start with the first entity type, place a verb such as “have” or “contains” and read the symbol or *cardinality* of the second entity type. Examples from the CID logical database model are shown in Figure 2.

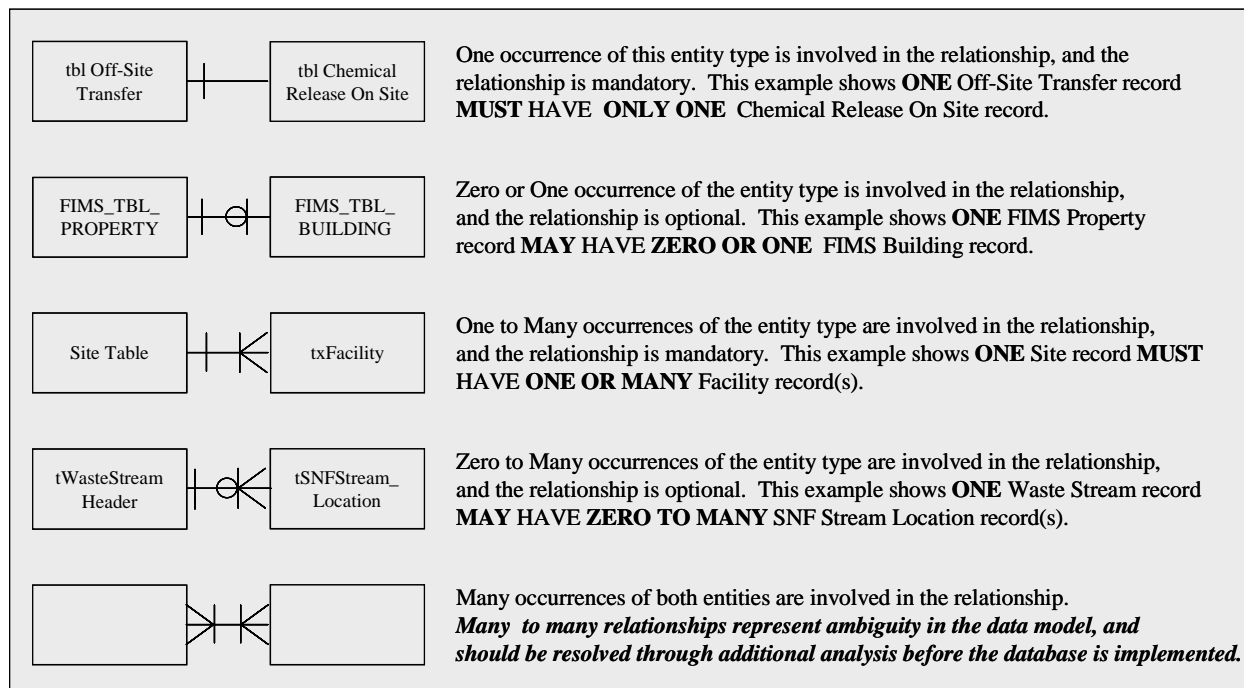
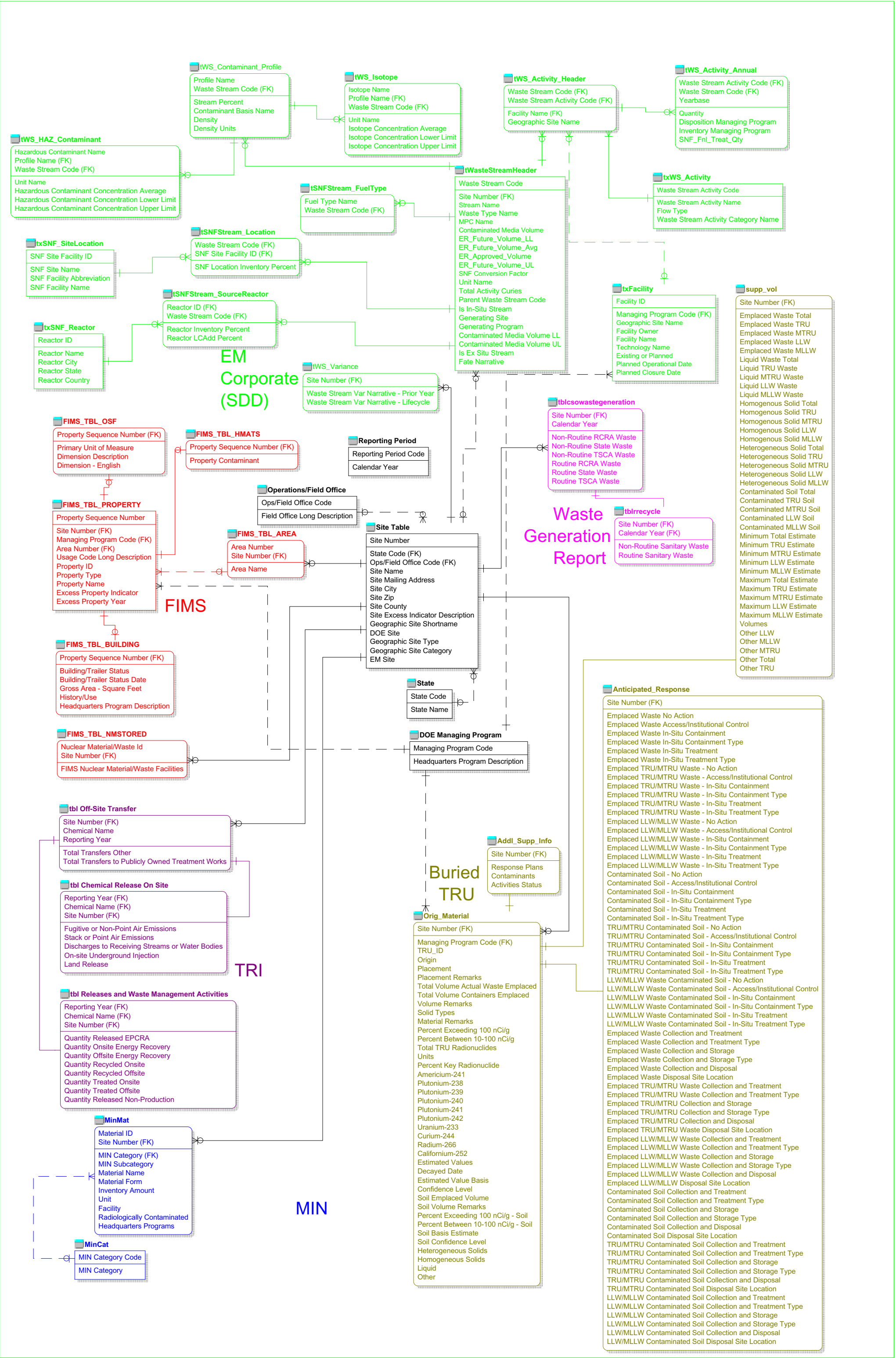


Figure 2: Data Model Relationship Types

The CID Logical Database Model is presented in Figure 3. Analyses of data sources have determined that each source system provides a unique set of data and structure that prohibits complete integration of all the data elements. The project team, therefore, adopted a “hub architecture” for the data models, where each data source is represented as a separate set of tables. Those tables that are shared across each data source (e.g. site) are identified as “hubs” and can be used as common points of access for any information stored in the CID.

Entities from the six data sources are represented by different colors in the logical database model. The four tables shown in black in the middle of the model represent the shared entities or “hubs” common to each data source.



4.3 Functional Requirements

The PEIS Settlement Agreement requires that the CID be made available to the public through the Internet. The CID development team designed a web-based interface through which users can obtain access to the CID. The functional requirements presented in this section describe the capabilities of the user interface and the functional characteristics needed to support production of reports.

Table 4 presents the CID functional requirements. The table is divided into sections, with the “Overall Structure” section describing the basic components of the CID user interface. Subsequent sections present detailed requirements associated with each basic component.

Table 4 CID Functional Requirements

Requirement Number	Requirement Statement	Category
Overall Structure		
FUNC-001	<p>The interface will include the following components:</p> <ul style="list-style-type: none">– Home Page– “What’s New” page– “Overview” Page– “Web Site Map” Page– “Links” Page– “Feedback” Page– “Getting Started” Page– “Glossary” Page– “User Help” Page– “Report Builder” Page– “Summary Reports” Page– “Standard Reports” Page– “User-Defined Reports” Page	R
FUNC-002	<p>Every screen will have a menu bar which will present the user with the following options:</p> <ul style="list-style-type: none">– “What’s New” Page– “Overview” Page– “Web Site Map” Page– “Links” Page– “Feedback” Page– “Getting Started” Page– “Report Builder” Page	R

Requirement Number	Requirement Statement	Category
Overall Structure (continued)		
FUNC-003	Every screen will have a link to the “Glossary” and the “User Help” feature for user reference throughout the system. The system will separate the “Glossary” feature and a “User Help” feature to distinguish them.	R
FUNC-004	The system will make minimal use of graphics and provide users guidance on turning off graphics to enhance performance of slower machines.	R
“What’s New” Page		
FUNC-005	On the “What’s New” Page, the system will have a welcome message, quick facts about the web site, and current events related to the PEIS Settlement Agreement. This page will serve as the home page for the web site and inform the user about the following: <ul style="list-style-type: none"> – Features recently added to the web site – The exact date and time of the last data migration for each source (i.e., “These data are current as of day/month/year”) – The reporting periods covered by the migrated data, listed by source 	R
FUNC-006	As appropriate, the interface will include an icon of the United States that will allow the user to access a screen to select a state or site of interest for report generation. (See Standard Reports section)	O
FUNC-007	The system will include a feature that will execute a key word search of the web site contents.	O
“Overview” Page		
FUNC-008	The system will have an “Overview” section that will present the user with background information on the PEIS Settlement Agreement and the EM Program and other background information that will help users understand the data available on the web site.	R

Requirement Number	Requirement Statement	Category
“Web Site Map” Page		
FUNC-009	The system will contain a “Web Site Map” listing all functional areas of the site displayed in a hierarchical format. The map will contain a link to each web site section.	R
“Links” Page		
FUNC-010	For the purpose of enhancing the usefulness of the CID, DOE will provide links to other DOE site-specific databases (these may include certain facility-specific or program-specific information).	M
FUNC-011	The system will provide links to other non-DOE web sites and databases that would supplement the information contained in the CID or provide other useful information on related topics, organizations, and hazardous waste.	R
FUNC-012	<p>Web site links will be organized by the following categories:</p> <p><u>DOE</u></p> <ul style="list-style-type: none"> – Site-Specific Databases – Headquarters Databases – On-Line Libraries – Waste Management Information - Site Specific – Waste Management Information - Headquarters – Environmental Reports – Nuclear Material Information <p><u>Non-DOE</u></p> <ul style="list-style-type: none"> – Transportation Information – EPA Information – Links to Plaintiff Web Sites (where available) – Other relevant sites (to be determined) <p>A current list of available links is included in Appendix C.</p>	R
FUNC-013	The list of available links will provide the name, owner, URL, and brief description of the site.	R
FUNC-014	The “Links” page will include a disclaimer about the content of all non-DOE web pages.	R

Requirement Number	Requirement Statement	Category
“Feedback” Page		
FUNC-015	The system will contain a “Feedback” feature that will enable users to ask questions about the content of the site, its functionality, its presentation, and provide additional comments. The feedback feature will also enable users to provide additional comments, and the feedback will be sent directly to a DOE representative via e-mail.	O
FUNC-016	The “Feedback” feature will have the capability to track questions and responses on reports, as they arise.	O
“Getting Started” Page		
FUNC-017	The system will provide a “Getting Started” feature, which will provide the user with a quick reference guide on how to use the web site.	R
“Glossary” Page		
FUNC-018	At a minimum, the Glossary will have the following features: <ul style="list-style-type: none"> – A list of definitions of all of the terms used in the database and application – An explanation of waste types (e.g., low-level waste (LLW), mixed low-level waste (MLLW)) – An explanation of other waste types (e.g., spent nuclear fuel (SNF), contaminated facilities, material in inventory (MIN)) – A list of acronyms – An explanation of the different management activities (e.g., generated, treated, stored) – An explanation of different units of measure for radionuclides and hazardous chemicals (e.g., mass, volume, radioactivity) and conversion tables, where appropriate 	R
FUNC-019	Glossary terms will be listed in alphabetical order on the screen. The Glossary will be “searchable” to access the desired definition(s).	O
FUNC-020	The “Glossary” will be accessed through a new browser window so users can run this feature without interrupting their current operations.	R

Requirement Number	Requirement Statement	Category
“User Help” Page		
FUNC-021	<p>The system will have a “User Help” function that will present the following options:</p> <ul style="list-style-type: none"> – An <u>Index</u> of available help topics. The user will be able to access this feature from any screen on the web site. – The <u>Technical Support</u> option will have contact information for users that need assistance operating the system. It will provide information for contacting support staff for technical or operational assistance with using the CID (e.g., phone numbers and e-mail addresses). – The <u>Data Dictionary</u> option will provide an explanation for all the data elements in the CID. The data dictionary will be accessible from all screens where it may be necessary to define data elements (e.g., user-defined reports, filtering standard reports). 	R
FUNC-022	The “User Help” function will also contain context-sensitive functionality.	O
FUNC-023	The “User Help” will be displayed in a separate browser window so users can run this feature without interrupting their current operation.	R
“Report Builder” Page		
FUNC-024	<p>The system will have a main report page. There will be three types of reports available to the user on a main report page:</p> <ul style="list-style-type: none"> – Summary Reports – Standard Reports – User-Defined Reports <p>Each option will be accompanied by a description that adequately describes the category of report.</p>	R

Requirement Number	Requirement Statement	Category
“Report Builder” Page (continued)		
FUNC-025	<p>The system will enable the user to choose an output format for standard and user-defined reports after the criteria for the report has been established. The output format screen will be the last screen presented to the user before the results of a report are displayed. The possible formats for output will include:</p> <ul style="list-style-type: none"> – Hypertext Markup Language (HTML) – Portable Document Format (PDF) – Comma delimited file (importable to spreadsheet applications) 	R
FUNC-026	The user will be able to print one, multiple, or all pages of a report.	O
“Summary Reports” Page		
FUNC-027	The system will present a list of available Summary Reports in a menu format. Each Summary Report will be accompanied by a description of its data content and presentation format.	R
FUNC-028	The system will not allow the user to modify the data in any Summary Report.	R
“Standard Reports” Page		
FUNC-029	Through selecting a map icon, a larger map will appear and prompt the user to choose a specific state. Once a state has been selected, the system will provide a detailed state map that includes all of the DOE sites within that state and will allow the user to run either a “state-specific” or “site-specific” Standard Report.	O

Requirement Number	Requirement Statement	Category
“Standard Reports” Page (continued)		
FUNC-030	<p>The Standard Reports option will include “profile” reports that provide complete information on the profile topic. For example, the site profile will contain information from all data sources for the chosen site(s) (e.g., waste data, contaminated facilities, materials in inventory data, toxic release inventory data, pollution prevention data, spent fuel data). The categories of Standard (or Profile) Reports that may be appropriate include:</p> <ul style="list-style-type: none"> – Site Profile - provides all data on selected site(s) – Data Category Profile - provides all data on a selected category (e.g., contaminated facilities, radioactive waste, spent nuclear fuel) – Program Profile - provides all data for selected DOE programs (e.g., EM, DP, SC, NE) – Operations Office Profile - provides all data for selected DOE Field/Operations Offices – Yearly Profile - provides all data for a specified year – State Profile - provides all data for a specified state 	R
FUNC-031	<p>The filtering capabilities for Standard Reports that may be appropriate include:</p> <ul style="list-style-type: none"> – Standard Report Title (user may select only one) – Site (e.g., Pantex Plant, Hanford, Savannah River - user may select one, multiple, or all sites) – Data Category (e.g., materials in inventory, radioactive waste, contaminated facilities - user may select one, multiple, or all data sources) – Program (user may select one, multiple, or all programs) – Operations Office (user may select one, multiple, or all Operations Offices) – Year (user may select one, multiple, or all years) – State (user may select one, multiple, or all states) 	R
FUNC-032	The system will notify the user if no data matches the Standard Report they designed.	R

Requirement Number	Requirement Statement	Category
“User Defined Reports” Page		
FUNC-033	<p>The system will provide a User-Defined Report option that will include a number of steps to construct a custom query and report:</p> <ul style="list-style-type: none"> – Data category selection – Column selection – Data criteria selection – Sort criteria – Data aggregation – Output customization 	R
FUNC-034	After the user has completed a step, the system will present the option of returning to a previously completed step to make changes to the criteria.	R
FUNC-035	The system will provide a library of pre-created queries for other users to access.	O
FUNC-036	<p>The “<u>data category selection</u>” screen will include the following data categories:</p> <ul style="list-style-type: none"> – Materials in inventory (MIN Database) – Contaminated facilities (FIMS Database) – Non-radioactive hazardous waste (Waste Generation Report) – Toxic release inventory (TRI database) – Radioactive waste (EM Corporate Database) – Contaminated Media (EM Corporate Database) – Buried transuranic waste (Buried TRU Database) – Cross-sections of source data, as appropriate (to be further defined in functional design document) <p>The user will be allowed to choose only one data category.</p>	R
FUNC-037	After the user has selected a data category, the “ <u>column selection</u> ” screen will be enabled. The system will present only the columns (i.e., data elements) that correspond to the data set that was selected in the previous screen. The system will allow the user to select those columns to be included in the User-Defined Report.	R

Requirement Number	Requirement Statement	Category
“User Defined Reports” Page (continued)		
FUNC-038	<p>Within each data category, the data element that is used to identify the main record for the data source will automatically be selected as a column in the “<u>column selection</u>” screen. The following is a list of the identifying data elements, by source:</p> <ul style="list-style-type: none"> – MIN Database: Material ID – FIMS Database: Property Sequence Number – Waste Generation Report: Site ID – TRI Database: Facility Name – EM Corporate Database: Waste Stream Code – Buried TRU Database: Site Name <p>The system will give the user the option of de-selecting this column but will be advised that results may be difficult to interpret if this identifying element is not included in the final report.</p>	O
FUNC-039	The user will have the option of determining the order in which the columns will appear on the report. The system will produce a report with data elements in the order they were selected if the user does not provide order numbers.	R
FUNC-040	The system will provide a warning when a user exceeds a certain number of columns (to prevent poor format and readability).	R
FUNC-041	<p>Once the user has selected the columns that will be in the final report, the system will present the “<u>data criteria selection</u>” screen. This screen will include the columns the user has selected and will allow the user to define the following parameters:</p> <ul style="list-style-type: none"> – For columns that contain text or alphanumeric options from a list of valid values, the user will choose (from a pull down menu) the specific values to be used in the report. The user will have the option of selecting one or multiple entries. – For numerical data, the user will have the option of filtering data based on a value and operator to designate less than (<), equal to (=), or greater than (>). 	R

Requirement Number	Requirement Statement	Category
“User Defined Reports” Page (continued)		
FUNC-042	After the user has selected the data criteria to be included in the report, the “ <u>sort criteria</u> ” screen will be enabled. This screen will include options for choosing up to five sorting levels. The sorting levels will be presented to the user as pull down menus, where the columns selected in the “column selection” screen will appear. Each sorting level will allow the user to choose between sorting the data in ascending or descending order.	R
FUNC-043	If a numeric value is selected as a “column” and it has a corresponding “units” field in the data table, the “units” field will automatically be selected to accompany the value on the output.	R
FUNC-044	After the user has defined how the report will be sorted, the “ <u>data aggregation</u> ” screen will be enabled. This screen will include options to allow the user to choose: <ul style="list-style-type: none"> • Columns that were selected that they wish to be reported as an aggregate value (e.g., sum total). • Whether those fields will be aggregated as record counts, sum totals, or both • Whether report should include detailed records or summaries 	R
FUNC-045	The type of data in a field will dictate if the system can perform a sum total or a count. Only numerical data will be summed. Record counts for non-numeric data will be available, where appropriate.	R
FUNC-046	The “ <u>data aggregation</u> ” screen will include an option for the user to select whether detailed records, aggregate data , or both detailed <i>and</i> aggregate data will appear on the output.	R
FUNC-047	Following the “ <u>data aggregation</u> ” screen, the user will be allowed to “ <u>customize the output</u> ” of the report. This screen will include options for the user to name the report; choose the format of the report (i.e., HTML, PDF, comma-delimited).	R
FUNC-048	The system will notify the user if no information matches the report they designed.	R

Requirement Number	Requirement Statement	Category
FUNC-049	The output will include printed information on the selection criteria chosen by the user to generate the report.	O
FUNC-050	The system will allow the user to select a font type and choose to print landscape or portrait.	O
FUNC-051	The system will include the ability to display information obtained from a User-Defined Report as a graph or chart (e.g., pie chart, histograms, or line graphs). (For further discussion, see Section 6 - Assumptions & Issues)	O

4.4 Technical Requirements

Although there are no Technical Specifications outlined in the PEIS Settlement Agreement, it is assumed that the Central Internet Database needs to be available to users with a variety of computer skills and equipment. A minimal technical configuration has been established to accommodate the disparate technical resources in the user community. The Technical Requirements for accessing the CID via the Internet are listed in Table 5.

Table 5 CID Technical Requirements

Requirement Number	Requirement Statement	Category
TECH-001	<p>The minimal components for the client workstation are:</p> <ul style="list-style-type: none"> • Internet connection (14.4 kbps modem or faster) • Netscape Navigator Version 3.0 or later, Microsoft Internet Explorer Version 3.0 or later • Monitor set to 256 colors • JavaScript enabled 	R
TECH-002	The system will be accessible 24 hours a day, 7 days a week, except for scheduled maintenance and upgrades.	R
TECH-003	The system will be operable without requiring the use of software plug-ins on the client workstation.	R
TECH-004	The database will be designed to provide read-only access to all users.	R
TECH-005	The browser and software will support the use of “cookies.”	R
TECH-006	The browser will support the use of frames.	R

Requirement Number	Requirement Statement	Category
TECH-007	The CID server configuration and operating procedures will not preclude implementation of required EM security measures for web hardware and software.	R
TECH-008	The system will be designed to operate with a monitor resolution of 800 x 600 pixels.	R
TECH-009	The system will be designed to meet all applicable regulations and policies governing web site design for the disabled, and will provide an appropriate level of accessibility to users with disabilities.	O
TECH-010	The system will accommodate 150 users concurrently.	O
TECH-011	Technical and user support staff will be available to CID users by phone during east coast business hours for the first three months of CID operations.	R
TECH-012	User support after three months of CID operations will consist of e-mail and voice mail communications. Replies to requests received through e-mail or voice mail will occur within 24 business hours of receipt of message.	R

5. System Architecture

CID Version 1.0 has been developed using the following hardware and software components consistent with the general technical requirements that the project team, in conjunction with stakeholders, agreed upon prior to development:

Hardware: *Dell PowerEdge 4300*

- 550 MHz Pentium III Dual Processors
- 27.3 GB Hard drive
- 512K Cache
- 512MB RAM

Software: *Database software platform - Oracle (Version 8i)*

Application development software

- Cold Fusion (Version 4.01)
- Microsoft IIS (Version 4.0)

Report development software - Crystal Reports (Version 7.0)

The overall logical architecture of the CID application is depicted in Figure 4. As shown, the CID supports a three tier thin client architecture to eliminate the need for client side (end user) software installation. The three-tier thin client architecture uses standard web browsers (Microsoft Internet Explorer 3.0 or above, Netscape Navigator 3.0 or above) for end user access via the Internet. The CID is usable without requiring the use of software plug-ins on the client machine to support system operation.

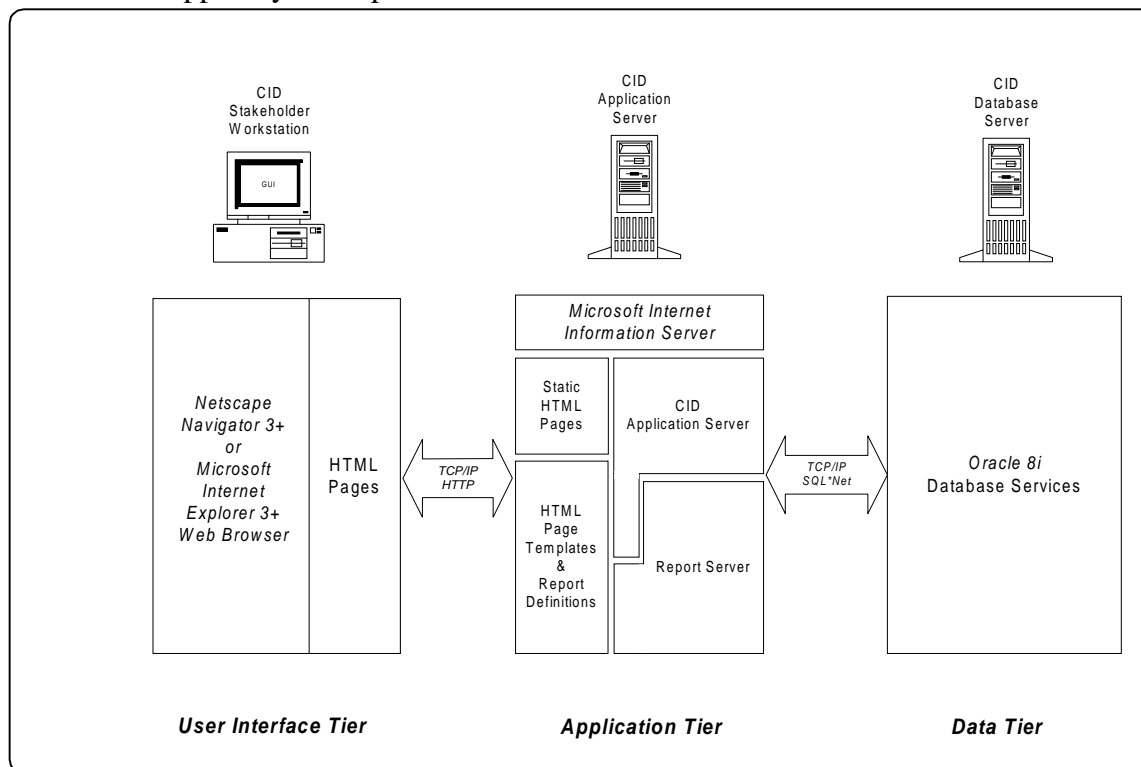


Figure 4: CID Technical Architecture

Users access the CID through a personal computer (**CID Stakeholder Workstation**) by browsing to the CID Homepage at <http://cid.em.doe.gov>. To users, the interactions between the three tiers of the system architecture are transparent. Users interface with a series of web pages presented based upon selections made in the navigation process. The system guides users through the reporting process using system-generated prompts.

The CID application is located on the **CID Application Server**. The CID Application Server is accessed immediately when users open the CID Homepage. The CID application enables users to select reports, specify filter parameters, and invoke the report generation applications.

The data displayed in CID report outputs (from the CID database) are located on the **CID Database Server**. The database is implemented on the DOE standard Oracle 8i relational database. Once a user selects all the selection criteria for a report and submits the report, the CID Application Server contacts the CID Database Server to access the appropriate data for the report output. The CID Application Server then sends the data to the CID Stakeholder Workstation in the selected format.

Ready-to-read reports are pre-generated and stored on the CID Application Server as portable document files (PDF); PDF is the only output format available for ready-to-read reports. *Standard reports* are developed using the Commercial Off-the-Shelf (COTS) reporting tool Crystal Reports (Version 7.0). The physical structures of the standard reports have been coded and stored on the CID Application Server. When users identify specific criteria for a standard report, the requested data is loaded into the standard format. *User-defined* reports support a non-technical interface for user access. A custom interface specific to the needs of the CID has been developed. Report generation automatically returns the report in the selected output format (i.e., PDF, delimited text file, HTML, etc.) to the user's web browser.

Microsoft Internet Information Server (IIS) (Version 4.0) provides the interface between the CID application and the Internet. A standard scripting language, ColdFusion (Version 4.01), that supports relational database access, has been used to implement the CID application.

5.1 System Security Requirements

The CID system does not require user logins and passwords to access system features. However, the production environment is implemented consistent with DOE security procedures (DOE Notice 205.1 and Draft 2.1a of the *DOE Public Server Security Manual*) to ensure that users of the system cannot compromise the integrity of other systems and databases connected to the communications infrastructure that support the CID. In addition, the CID is read-only to ensure data integrity. All data contained within the CID has been cleared for public distribution via the Internet. The CID does not contain any data considered:

- Classified
- Unclassified controlled nuclear information (UCNI)
- Operational security (OPSEC)
- Official use only (OUO)

5.2 Backup and Recovery Requirements

The CID backup procedures are compliant with the requirements defined in Notice 205.1 and Draft 2.1a of the *DOE Public Server Security Manual*. In the event of a failure, the backup procedures applied to the CID operating software, application, and database itself enable recovery with minimum service interruption. The backups are timed to correspond with updates of the system software, application code, and database throughout the maintenance period. Appropriate off-site storage of backups are performed. Procedures have been defined and put in place to support backup and recovery processing. Where possible, duplicate hardware and operating environments are being used to support system availability requirements.

5.3 User Support Approach

DOE offers extensive user support for the CID. First, the CID Help Desk is available by telephone, Monday through Friday during regular business hours (EST). In addition, users can contact the CID Help Desk via email at cidsupport@ppc.com. Second, users can provide comments and concerns regarding the CID through the Feedback link on the CID website. Comments made through the feedback page will be sent directly to the DOE Project Manager and the CID development team. Finally, users can contact the CID Point-of-Contact and the CID Project Manager directly:

CID Point-of-Contact: Jim Werner
Email - James.Werner@em.doe.gov
Phone - 202-586-9280

CID Project Manager: Matt Zenkowich
Email - Mathew.Zenkowich@em.doe.gov
Phone - 202-586-4612

All comments and feedback will be addressed as appropriate and suggestions for improvement will be evaluated and considered for incorporation in future versions of the CID. Once a question or comment is received by the CID Help Desk and/or a CID contact, it is logged into the CID Support Tracking System. If the question or comment requires a response, a CID project team member will contact the person with an appropriate response or other necessary feedback. All communications regarding a question or comment is also tracked in the CID Support Tracking System.

If a comment needs to be implemented immediately into the current version of the CID, a change control request is submitted and the change control process is initiated. If the CID project team decides that the request should be incorporated in a future version of the CID, it remains as a feedback entry in the CID Support Tracking System and will be analyzed in the requirements gathering phase of development for the next version of the CID.

6. Assumptions and Issues

6.1 Assumptions and Constraints

For the purpose of this document, assumptions are conditions or characteristics where the CID project team does not have direct control or authority. Therefore the project team assumes that the documented conditions exist or will be accomplished by other responsible parties.

Constraints are external conditions beyond the control of the project team that place a restriction on the implementation and use of the CID.

The assumptions and constraints for the CID (as of the publication of this document) are:

Assumptions

1. Data from the source systems are of sufficient quality to provide meaningful reports and reflect the most current information available as of the migration date.
2. Data on spent nuclear fuel will be updated to the EM Corporate Database from the National Spent Fuel Database (NSFD) after the EM Corporate data is final. The NSFD data will be reconciled to the EM Corporate database records.
3. Data for non-EM programs requested in the PEIS Settlement Agreement (i.e. DP, SC, and NE) will be provided to the EM Corporate Database through regular data collection and update processes.
4. The web user interface functionality assumes that the user has a basic level of understanding on personal computer (PC) operation and basic functions of a web browser.
5. The project team assumes that all data sources map each site to the same Operations/Field Office.
6. The initial implementation of the CID will be outside of the DOE firewall.

Constraints

1. System response time and length of time required to execute a report will depend on the report execution cannot be precisely specified due to the unpredictability of volume of use in a publicly accessed system.
2. FUSRAP sites are not currently managed by DOE, and therefore, no DOE system will be providing FUSRAP site data. If at any time one or more of these sites are returned to DOE for management, the Department will determine how best to include the FUSRAP site(s) data in the CID.

3. There is no data source currently identified for Nuclear Waste Policy Act (151b) sites. Should DOE identify a viable source for NWPA site data, this will be included in the CID.
4. Some data in all CID source systems may be incomplete or incorrectly entered. In these cases, the data may be presented incorrectly on outputs. The CID Project Team cannot change data received from source systems. All changes must originate from the source databases or be pre-approved by the database owners.
5. The valid list of sites used for the CID are a combination of all valid site records from each data source. Duplicate records are reconciled. Therefore, some site names used in each source database may be different from site names used in the CID.

6.2 Issues

A number of issues were identified through the implementation effort. The project team created a system to track project issues and their resolution. As issues arose, actions were taken to resolve and close each issue and document the resolution. This system remains active to capture and track issues and resolutions prior to reaching future project milestones. Table 6 lists issues that are open (i.e., unresolved) as of the publication date of this document, and their impacts on future project activities.

Table 6 CID Project Issues

#	Issue Description	Impact	Proposed Resolution
1	The EM Corporate Database captures one generating program for each waste stream, although more than one program may be responsible for the generation of the stream.	The data that the CID is required to provide may not be complete.	For the next EM Corporate update, the field will provide the DOE program that is the primary contributor for the waste stream.
2	Buried TRU data are still being finalized and are not yet available in the CID. It is unclear at this time, how Buried TRU data will be presented in the CID. This decision depends on the content and organization of Buried TRU data.	Once finalized, the CID data will need to be analyzed by the CID Project Team to develop migration routines, integrate Buried TRU data in the CID, and possibly develop reports. Further delays could impact the final release schedule of the CID, and delay further progress in reaching PEIS Settlement milestones.	Assuming the Buried TRU data is finalized by May/June 2000, the CID report team anticipates having Buried TRU reports available in the CID when the next data update is complete (Summer/Fall 2000).

#	Issue Description	Impact	Proposed Resolution
3	Although the EM Corporate database contains data on radioactivity, it is unclear at this time how best to aggregate and summarize radioactivity information in the CID reports.	If radioactivity needs to be computed based on scientific algorithms, current CID reports that summarize radioactivity will need to be modified. Database changes may be required to store information required by algorithms.	DOE Project Manager and project team are currently consulting with waste and SNF experts to determine the best way to present this data.
4	The ability for a user to select a data set has not yet been built into the CID. Once there is a complete set of updated data, this will become an important issue. Need to determine how the CID will hold multiple sets of data and how users will be able to access the different data sets.	Depending on how the data set option will be implemented, and how source systems store historical data, some changes in reports may be required from year to year as data sets are updated. Scope of changes is currently unknown.	CID Project Team is analyzing the first sets of new data updates, and is constructing implementation approaches to identify distinct data sets.
5	Data update schedule has not been established.	This issues has impacts on issue #4. Data update schedule will drive resource needs for annual/semi-annual data migrations and analyses required to ensure CID reports support new data.	The DOE Project Manager and CID Project Team will meet with source database owners soon to determine optimal time to retrieve data and set a schedule for performing migrations.

Appendix A

Web Sites Analyzed for Central Internet Database Capabilities

In determining the functional requirements, a general search of the Internet was performed to identify any web sites addressing similar issues and utilizing similar tools. The following web sites were identified as such and were referred to when developing the functional requirements:

1. *Annual Report of Waste Generation and Pollution Prevention Progress:*
<http://twilight.saic.com/WasteMin/MainReports.htm>
2. *Center for Environmental Information and Statistics:* <http://www.epa.gov/ceis>
3. *Cleveland Area Network for Data and Organizing (CAN DO):*
http://129.22.45.115/cd_cuy.htm
4. *Energy Information Association:* <http://tonto.eia.doe.gov/iq2>
5. *EPA's Envirofacts Warehouse:*
http://www.epa.gov/reg50opa/students/envirofacts_warehouse.htm
6. *Manifest Information System (MIMS):* <http://mims.inel.gov>
7. *Scorecard:* <http://www.scorecard.org>
8. *Washington State Department of Ecology's Facility/Site Identification System:*
<http://www.wa.gov/ecology/iss/fsweb/fshome.html>

Appendix B

Central Internet Database Data Dictionary

Appendix B - Central Internet Database Logical Data Dictionary

Central Internet Database Logical Data Dictionary (In Alphabetical Order by Table Name)

Table Name	Data Element Name	Definition
Addl_Supp_Info	Activities Status	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Activities Status" field provides additional text on the status of environmental management activities at the site (e.g., ongoing/planned investigations, major milestones, and any additional notes on response plans).
	Contaminants	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminants" field provides additional information about contaminants in the emplaced material within the site area, including non-radiological content (e.g., hazardous chemicals), as appropriate.
	Response Plans	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Response Plans" field provides further supporting detail on response plans, as needed, including references or agreements that have resulted in the responses including (1) Collection and Treatment, (2) Collection and Storage, (3) Collection and Disposal.
Anticipated_Response	Contaminated Soil - Access/Institutional Control	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil - Access/Institutional Control" field quantifies the total amount of contaminated soil that is currently planned to be managed in-place within the site area through access/institutional controls.
	Contaminated Soil - In-Situ Containment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil - In-Situ Containment" field quantifies the total amount of contaminated soil that is currently planned to be managed in-place through in-situ containment.
	Contaminated Soil - In-Situ Containment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil - In-Situ Containment Type" field provides information on the site-specific type of in-situ containment that will be utilized for the management of the quantity of contaminated soil that will be managed within the site area through in-situ containment (as denoted in the "Contaminated Soil - In-Situ Containment" field).
	Contaminated Soil - In-Situ Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil - In-Situ Treatment" field quantifies the total amount of contaminated soil that is currently planned to be managed in-place within the site area through in-situ treatment.
	Contaminated Soil - In-Situ Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil - In-Situ Treatment Type" field provides information on the site-specific type of in-situ treatment that will be utilized for the management of the quantity of contaminated soil that will be managed within the site area through in-situ treatment (as denoted in the "Contaminated Soil - In-Situ Treatment" field).
	Contaminated Soil - No Action	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil - No Action" field quantifies the total amount of contaminated soil that is currently planned to be managed in-place within the site area through no action.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Contaminated Soil Collection and Disposal	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil Collection and Disposal" field quantifies the total amount of contaminated soil within the site area that is currently planned to be removed for further management through collection and disposal.
	Contaminated Soil Collection and Storage	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil Collection and Storage" field quantifies the total amount of contaminated soil within the site area that is currently planned to be removed for further management through collection and storage.
	Contaminated Soil Collection and Storage Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil Collection and Storage Type" field provides information on the type and location of storage that will be utilized for the management of the quantity of contaminated soil within the site area that will be managed through collection and storage (as denoted in the "Contaminated Soil Collection and Storage" field).
	Contaminated Soil Collection and Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil Collection and Treatment" field quantifies the total amount of contaminated soil within the site area that is currently planned to be removed for further management through collection and treatment.
	Contaminated Soil Collection and Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil Collection and Treatment Type" field provides information on the site-specific type of treatment that will be utilized for the management of the quantity of contaminated soil within the site area that will be managed through collection and treatment (as denoted in the "Contaminated Soil Collection and Treatment" field).
	Contaminated Soil Disposal Site Location	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil Disposal Site Location" field provides information on the disposal site location that will be utilized for the management of the quantity of contaminated soil within the site area that will be managed through collection and disposal (as denoted in the "CS C&D" field).
	Emplaced LLW/MLLW Disposal Site Location	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Disposal Site Location" field provides information on the disposal site location that will be utilized for the management of the quantity of emplaced low-level/mixed low-level waste within the site area that will be managed through collection and disposal (as denoted in the "Emplaced LLW/MLLW Waste Collection and Disposal" field).
	Emplaced LLW/MLLW Waste - Access/Institutional Control	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Waste - Access/Institutional Control" field quantifies the total amount of emplaced low-level/mixed low-level waste within the site area that is currently planned to be managed in-place through access/institutional controls.
	Emplaced LLW/MLLW Waste - In-Situ Containment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Waste - In-Situ Containment" field quantifies the total amount of emplaced low-level/mixed low-level waste within the site area that is currently planned to be managed in-place through in-situ containment.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Emplaced LLW/MLLW Waste - In-Situ Containment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Waste - In-Situ Containment Type" field provides information on the site-specific type of in-situ containment that will be utilized for the management of the quantity of emplaced low-level/mixed low-level waste within the site area that will be managed through in-situ containment (as denoted in the "Emplaced LLW/MLLW Waste - In-Situ Containment" field).
	Emplaced LLW/MLLW Waste - In-Situ Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Waste - In-Situ Treatment" field quantifies the total amount of emplaced low-level/mixed low-level waste within the site area that is currently planned to be managed in-place through in-situ treatment.
	Emplaced LLW/MLLW Waste - In-Situ Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Waste - In-Situ Treatment Type" field provides information on the site-specific type of in-situ treatment that will be utilized for the management of the quantity of emplaced low-level/mixed low-level waste within the site area that will be managed through in-situ treatment (as denoted in the "Emplaced LLW/MLLW Waste - In-Situ Treatment" field).
	Emplaced LLW/MLLW Waste - No Action	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Waste - No Action" field quantifies the total amount of emplaced low-level/mixed low-level waste within the site area that is currently planned to be managed in-place through no action.
	Emplaced LLW/MLLW Waste Collection and Disposal	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Waste Collection and Disposal" field quantifies the total amount of emplaced low-level/mixed low-level waste within the site area that is currently planned to be removed for further management through collection and disposal.
	Emplaced LLW/MLLW Waste Collection and Storage	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Waste Collection and Storage" field quantifies the total amount of emplaced low-level/mixed low-level waste within the site area that is currently planned to be removed for further management through collection and storage.
	Emplaced LLW/MLLW Waste Collection and Storage Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Waste Collection and Storage Type" field provides information on the type and location of storage that will be utilized for the management of the quantity of emplaced low-level/mixed low-level waste within the site area that will be managed through collection and storage (as denoted in the "Emplaced LLW/MLLW Waste Collection and Storage" field).
	Emplaced LLW/MLLW Waste Collection and Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Waste Collection and Treatment" field quantifies the total amount of emplaced low-level/mixed low-level waste within the site area that is currently planned to be removed for further management through collection and treatment.
	Emplaced LLW/MLLW Waste Collection and Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced LLW/MLLW Waste Collection and Treatment Type" field provides information on the site-specific type of treatment that will be utilized for the management of the quantity of emplaced low-level/mixed low-level waste within the site area that will be managed through collection and treatment (as denoted in the "Emplaced LLW/MLLW Waste Collection and Treatment" field).

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Emplaced TRU/MTRU Collection and Disposal	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Collection and Disposal" field quantifies the total amount of emplaced transuranic/mixed transuranic waste within the site area that is currently planned to be removed for further management through collection and disposal.
	Emplaced TRU/MTRU Collection and Storage	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Collection and Storage" field quantifies the total amount of emplaced transuranic/mixed transuranic waste within the site area that is currently planned to be removed for further management through collection and storage.
	Emplaced TRU/MTRU Collection and Storage Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Collection and Storage Type" field provides information on the type and location of storage that will be utilized for the management of the quantity of emplaced transuranic/mixed transuranic waste within the site area that will be managed through collection and storage (as denoted in the "Emplaced TRU/MTRU Collection and Storage" field).
	Emplaced TRU/MTRU Waste - Access/Institutional Control	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Waste - Access/Institutional Control" field quantifies the total amount of emplaced transuranic/mixed transuranic waste within the site area that is currently planned to be managed in-place through access/institutional controls.
	Emplaced TRU/MTRU Waste - In-Situ Containment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Waste - In-Situ Containment" field quantifies the total amount of emplaced transuranic/mixed transuranic waste within the site area that is currently planned to be managed in-place through in-situ containment.
	Emplaced TRU/MTRU Waste - In-Situ Containment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Waste - In-Situ Containment Type" field provides information on the site-specific type of in-situ containment that will be utilized for the management of the quantity of emplaced transuranic/mixed transuranic waste within the site area that will be managed through in-situ containment (as denoted in the "Emplaced TRU/MTRU Waste - In-Situ Containment" field).
	Emplaced TRU/MTRU Waste - In-Situ Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Waste - In-Situ Treatment" field quantifies the total amount of emplaced transuranic/mixed transuranic waste within the site area that is currently planned to be managed in-place through in-situ treatment.
	Emplaced TRU/MTRU Waste - In-Situ Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Waste - In-Situ Treatment Type" field provides information on the site-specific type of in-situ treatment that will be utilized for the management of the quantity of emplaced transuranic/mixed transuranic within the site area waste that will be managed through in-situ treatment (as denoted in the "Emplaced TRU/MTRU Waste - In-Situ Treatment" field).
	Emplaced TRU/MTRU Waste - No Action	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Waste - No Action" field quantifies the total amount of emplaced transuranic/mixed transuranic waste within the site area that is currently planned to be managed in-place through no action.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Emplaced TRU/MTRU Waste Collection and Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Collection and Treatment" field quantifies the total amount of emplaced transuranic/mixed transuranic waste within the site area that is currently planned to be removed for further management through collection and treatment.
	Emplaced TRU/MTRU Waste Collection and Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Collection and Treatment Type" field provides information on the site-specific type of treatment that will be utilized for the management of the quantity of emplaced transuranic/mixed transuranic waste within the site area that will be managed through collection and treatment (as denoted in the "Emplaced TRU/MTRU Collection and Treatment" field).
	Emplaced TRU/MTRU Waste Disposal Site Location	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced TRU/MTRU Waste Disposal Site Location" field provides information on the disposal site location that will be utilized for the management of the quantity of emplaced transuranic/mixed transuranic waste within the site area that will be managed through collection and disposal (as denoted in the "Emplaced TRU/MTRU Waste Collection and Disposal" field).
	Emplaced Waste Access/Institutional Control	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste Access/Institutional Control" field quantifies the total amount of emplaced waste within the site area that is currently planned to be managed in-place through access/institutional controls.
	Emplaced Waste Collection and Disposal	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste Collection and Disposal" field quantifies the total amount of emplaced waste within the site area that is currently planned to be removed for further management through collection and disposal.
	Emplaced Waste Collection and Storage	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste Collection and Storage" field quantifies the total amount of emplaced waste within the site area that is currently planned to be removed for further management through collection and storage.
	Emplaced Waste Collection and Storage Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste Collection and Storage Type" field provides information on the type and location of storage that will be utilized for the management of the quantity of emplaced waste within the site area that will be managed through collection and storage (as denoted in the "Emplaced Waste Collection and Storage" field).
	Emplaced Waste Collection and Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste Collection and Treatment" field quantifies the total amount of emplaced waste within the site area that is currently planned to be removed for further management through collection and treatment.
	Emplaced Waste Collection and Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste Collection and Treatment Type" field provides information on the site-specific type of treatment that will be utilized for the management of the quantity of emplaced waste within the site area that will be managed through collection and treatment (as denoted in the "Emplaced Waste Collection and Treatment" field).

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Emplaced Waste Disposal Site Location	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste Disposal Site Location" field provides information on the disposal site location that will be utilized for the management of the quantity of emplaced waste within the site area that will be managed through collection and disposal (as denoted in the "Emplaced Waste Collection and Disposal" field).
	Emplaced Waste In-Situ Containment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste In-Situ Containment" field quantifies the total amount of emplaced waste within the site area that is currently planned to be managed in-place through in-situ containment.
	Emplaced Waste In-Situ Containment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste In-Situ Containment Type" field provides information on the site-specific type of in-situ containment that will be utilized for the management of the quantity of emplaced waste within the site area that will be managed through in-situ containment (as denoted in the "Emplaced Waste In-Situ Containment" field).
	Emplaced Waste In-Situ Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste In-Situ Treatment" field quantifies the total amount of emplaced waste within the site area that is currently planned to be managed in-place through in-situ treatment.
	Emplaced Waste In-Situ Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste In-Situ Treatment Type" field provides information on the site-specific type of in-situ treatment that will be utilized for the management of the quantity of emplaced waste within the site area that will be managed through in-situ treatment (as denoted in the "Emplaced Waste In-Situ Treatment" field).
	Emplaced Waste No Action	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste No Action" field quantifies the total amount of emplaced waste within the site area that is currently planned to be managed in-place through no action.
	LLW/MLLW Contaminated Soil Collection and Disposal	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Contaminated Soil Collection and Disposal" field quantifies the total amount of low-level/mixed low-level contaminated soil within the site area that is currently planned to be removed for further management through collection and disposal.
	LLW/MLLW Contaminated Soil Collection and Storage	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Contaminated Soil Collection and Storage" field quantifies the total amount of low-level/mixed low-level contaminated soil within the site area that is currently planned to be removed for further management through collection and storage.
	LLW/MLLW Contaminated Soil Collection and Storage Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Contaminated Soil Collection and Storage Type" field provides information on the type and location of storage that will be utilized for the management of the quantity of low-level/mixed low-level contaminated soil within the site area that will be managed through collection and storage (as denoted in the "LLW/MLLW Contaminated Soil Collection and Storage" field).

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	LLW/MLLW Contaminated Soil Collection and Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Contaminated Soil Collection and Treatment" field quantifies the total amount of low-level/mixed low-level contaminated soil within the site area that is currently planned to be removed for further management through collection and treatment.
	LLW/MLLW Contaminated Soil Collection and Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Contaminated Soil Collection and Treatment Type" field provides information on the site-specific type of treatment that will be utilized for the management of the quantity of low-level/mixed low-level contaminated soil within the site area that will be managed through collection and treatment (as denoted in the "LLW/MLLW Contaminated Soil Collection and Treatment" field).
	LLW/MLLW Contaminated Soil Disposal Site Location	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Contaminated Soil Disposal Site Location" field provides information on the disposal site location that will be utilized for the management of the quantity of low-level/mixed low-level contaminated soil within the site area that will be managed through collection and disposal (as denoted in the "CSL C&D" field).
	LLW/MLLW Waste Contaminated Soil - Access/Institutional Control	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Waste Contaminated Soil - Access/Institutional Control" field quantifies the total amount of low-level/mixed low-level contaminated soil within the site area that is currently planned to be managed in-place through access/institutional controls.
	LLW/MLLW Waste Contaminated Soil - In-Situ Containment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Waste Contaminated Soil - In-Situ Containment" field quantifies the total amount of low-level/mixed low-level contaminated soil within the site area that is currently planned to be managed in-place through in-situ containment.
	LLW/MLLW Waste Contaminated Soil - In-Situ Containment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Waste Contaminated Soil - In-Situ Containment Type" field provides information on the site-specific type of in-situ containment that will be utilized for the management of the quantity of low-level/mixed low-level contaminated soil within the site area that will be managed through in-situ containment (as denoted in the "LLW/MLLW Waste Contaminated Soil - In-Situ Containment" field).
	LLW/MLLW Waste Contaminated Soil - In-Situ Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Waste Contaminated Soil - In-Situ Treatment" field quantifies the total amount of low-level/mixed low-level contaminated soil within the site area that is currently planned to be managed in-place through in-situ treatment.
	LLW/MLLW Waste Contaminated Soil - In-Situ Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Waste Contaminated Soil - In-Situ Treatment Type" field provides information on the site-specific type of in-situ treatment that will be utilized for the management of the quantity of low-level/mixed low-level contaminated soil within the site area that will be managed through in-situ treatment (as denoted in the "LLW/MLLW Waste Contaminated Soil - In-Situ Treatment" field).
	LLW/MLLW Waste Contaminated Soil - No Action	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "LLW/MLLW Waste Contaminated Soil - No Action" field quantifies the total amount of low-level/mixed low-level contaminated soil within the site area that is currently planned to be managed in-place through no action.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	TRU/MTRU Contaminated Soil - Access/Institutional Control	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil - Access/Institutional Control" field quantifies the total amount of transuranic/mixed transuranic contaminated soil that is currently planned to be managed in-place within the site area through access/institutional controls.
	TRU/MTRU Contaminated Soil - In-Situ Containment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil - In-Situ Containment" field quantifies the total amount of transuranic/mixed transuranic contaminated soil that is currently planned to be managed in-place within the site area through in-situ containment.
	TRU/MTRU Contaminated Soil - In-Situ Containment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil - In-Situ Containment Type" field provides information on the site-specific type of in-situ containment that will be utilized for the management of the quantity of transuranic/mixed transuranic contaminated soil that will be managed within the site area through in-situ containment (as denoted in the "TRU/MTRU Contaminated Soil - In-Situ Containment" field).
	TRU/MTRU Contaminated Soil - In-Situ Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil - In-Situ Treatment" field quantifies the total amount of transuranic/mixed transuranic contaminated soil that is currently planned to be managed in-place within the site area through in-situ treatment.
	TRU/MTRU Contaminated Soil - In-Situ Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil - In-Situ Treatment Type" field provides information on the site-specific type of in-situ treatment that will be utilized for the management of the quantity of transuranic/mixed transuranic contaminated soil within the site area that will be managed through in-situ treatment (as denoted in the "TRU/MTRU Contaminated Soil - In-Situ Treatment" field).
	TRU/MTRU Contaminated Soil - No Action	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil - No Action" field quantifies the total amount of transuranic/mixed transuranic contaminated soil that is currently planned to be managed in-place within the site area through no action.
	TRU/MTRU Contaminated Soil Collection and Disposal	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil Collection and Disposal" field quantifies the total amount of transuranic/mixed transuranic contaminated soil within the site area that is currently planned to be removed for further management through collection and disposal.
	TRU/MTRU Contaminated Soil Collection and Storage	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil Collection and Storage" field quantifies the total amount of transuranic/mixed transuranic contaminated soil within the site area that is currently planned to be removed for further management through collection and storage.
	TRU/MTRU Contaminated Soil Collection and Storage Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil Collection and Storage Type" field provides information on the type and location of storage that will be utilized for the management of the quantity of transuranic/mixed transuranic contaminated soil within the site area that will be managed through collection and storage (as denoted in the "TRU/MTRU Contaminated Soil Collection and Storage" field).

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	TRU/MTRU Contaminated Soil Collection and Treatment	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil Collection and Treatment" field quantifies the total amount of transuranic/mixed transuranic contaminated soil within the site area that is currently planned to be removed for further management through collection and treatment.
	TRU/MTRU Contaminated Soil Collection and Treatment Type	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil Collection and Treatment Type" field provides information on the site-specific type of treatment that will be utilized for the management of the quantity of transuranic/mixed transuranic contaminated soil within the site area that will be managed through collection and treatment (as denoted in the "TRU/MTRU Contaminated Soil Collection and Treatment" field).
	TRU/MTRU Contaminated Soil Disposal Site Location	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU/MTRU Contaminated Soil Disposal Site Location" field provides information on the disposal site location that will be utilized for the management of the quantity of transuranic/mixed transuranic contaminated soil within the site area that will be managed through collection and disposal (as denoted in the "TRU/MTRU Contaminated Soil Collection and Disposal" field).
DOE Managing Program	Headquarters Program Description	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Headquarters Program Description" field identifies the name of the DOE Headquarters Program Office responsible for the building and its operations. Valid selections are: Defense Programs (DP), Energy Efficiency/Renewable Energy (EE), Environment, Safety & Health (EH), Environmental Management (EM), Fossil Energy (FE), Field Integration (FI), Nuclear Energy (NE), Other Program (OTHR), Radioactive Waste Management (RW), and Science (SC).
	Managing Program Code	Two letter code designating the DOE program responsible for the site and its operations. Valid values are: DP, EE, EH, EM, FE, FI, NE, RW, AND SC.
FIMS_TBL_AREA	Area Name	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Area Name" field identifies the name that is assigned by the Field Office to identify an administrative subdivision of a site.
	Area Number	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Area Number" is a three-digit number used to identify an administrative subdivision of a site.
	Site Number	Unique numeric code used to identify each site.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
FIMS_TBL_BUILDING	Building/Trailer Status	<p>Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Building/Trailer Status" field indicates the status of the trailer that reflects programmatic intentions as well as the physical/operational status of the trailer. Valid selections are:</p> <p>1 - Operating - No strict definition of this term.</p> <p>2 - Operational Standby - If there is any future programmatic use of the building (other than cleanup) expected.</p> <p>3 - Shutdown Pending Transfer - Indicates plans for the facility to be eventually transferred to another programmatic office or organization.</p> <p>4 - Shutdown Pending D&D - Indicates the facility has been shutdown for the purpose of final disposition, which can include deactivation and decommissioning (D&D) (regardless of when D&D activities are slated to start) - under this category, the programmatic office or organization responsible for D&D activities would have responsibility for this facility.</p> <p>5 - D&D in Progress - D&D activities are underway - this activity would be identified once funds have been budgeted and approved for expenditure.</p>
	Building/Trailer Status Date	<p>Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Building/Trailer Status Date" field identifies the date the building/trailer status is in effect. Status date is required for building/trailer status choices: Operational; Standby; Shutdown Pending Transfer; Shutdown Pending D&D; and D&D in Progress.</p>
	Gross Area - Square Feet	<p>Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Gross Area - Square Feet" field identifies the total floor area of a building in square feet (exterior wall to exterior wall).</p>
	Headquarters Program Description	<p>Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Headquarters Program Description" field identifies the name of the DOE Headquarters Program Office responsible for the building and its operations. Valid selections are: Defense Programs (DP), Energy Efficiency/Renewable Energy (EE), Environment, Safety & Health (EH), Environmental Management (EM), Fossil Energy (FE), Field Integration (FI), Nuclear Energy (NE), Other Program (OTHR), Radioactive Waste Management (RW), and Science (SC).</p>
	History/Use	<p>Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "History/Use" field briefly summarizes how the building has historically been used and the building operating history.</p>
	Property Sequence Number	<p>Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Property Sequence Number" field is a computer-generated number used to uniquely identify a facility record.</p>

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
FIMS_TBL_HMATS	Property Contaminant	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Property Contaminant" field provides the type of contamination present in the FIMS property according to the following valid values: N: No Contamination R: Radiological Contamination C: Chemical Contamination B: Both Radiological and Chemical Contamination
FIMS_TBL_NMSTORED	FIMS Nuclear Material/Waste Facilities	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "FIMS Nuclear Material/Waste Facilities" field stores the number of facilities that store the designated nuclear material or waste at a site.
	Nuclear Material/Waste Id	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Nuclear Material/Waste Id" field stores the name of the nuclear material or waste as follows: LLW, SNF,MLLW,HLW,SOURCE MATERIAL, RADIOLOGICAL OTHER, UNIRRADIATED NUCLEAR FUEL, TRU, MIXED TRU
FIMS_TBL_OSF	Dimension - English	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Dimension - English" field identifies the English unit of measure for structures. The label displayed on the screen is based on the value in the Usage Code Table.
	Dimension Description	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Dimension Description" field identifies the primary unit of measure for structures. The label displayed on the screen is based on the value in the Usage Code Table.
	Primary Unit of Measure	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Primary Unit of Measure" field is a numeric measurement for structures based upon the usage code. The primary unit of measure is controlled by Headquarters.
	Property Sequence Number	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Property Sequence Number" field is a computer-generated number used to uniquely identify a facility record.
FIMS_TBL_PROPERTY	Area Number	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Area Number" field is a three-digit number that identifies an administrative subdivision of a site.
	Excess Property Indicator	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Excess Property Indicator" field indicates (Y/N) whether the Field Office/Site has designated the property as excess now or will be excess in the future. It is not intended to indicate that the property has been formally declared excess to the Department's requirements by the Office of Field Integration (FI).

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Excess Property Year	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Excess Property Year" field indicates the year in which the Field Office/Site designates the property as excess.
	Property ID	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Property ID" field is a unique control number assigned by Headquarters to a property.
	Property Name	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Property Name" field identifies the name assigned to a specific property.
	Property Sequence Number	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Property Sequence Number" field is a computer-generated number used to uniquely identify a facility record.
	Property Type	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Property Type" field is a code that allows a Field Office to classify a property by type. Valid selections are: B - Building, L - Land, S - Other Structures (OSF), and T - Trailer/Modular.
	Usage Code Long Description	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Usage Code Long Description" field designates the current use of a property. Land usage codes consist of 2 characters, Building/Trailer usage codes consist of 3 characters, and OSF usage codes consist of 4 characters. For a complete list of valid selections, please refer to Appendices B, C, and E of the Facilities Information Management System (FIMS) User's Guide, which can be downloaded via the Internet at http://www.fm.doe.gov/FM-20/FIMS/FIMS.html
MinCat	MIN Category	Information is from the MIN Database. MIN materials are materials that are not currently in use (i.e., have not been used in the last year and are not reasonably expected to be used in the upcoming year), that have not been designated as waste, and that have not been set aside for defense purposes between 1993 and 1995. The "MIN Category" field identifies the MIN category that the stored material belongs to. MIN material has been grouped into 10 identifying categories. Valid MIN categories include Chemicals, Depleted Uranium, Natural & Enriched Uranium, Lithium, Sodium, Lead, Plutonium, Spent Nuclear Fuel, Scrap Metal and Equipment, and Weapons Components.
	MIN Category Code	Information is from the MIN Database. MIN materials are materials that are not currently in use (i.e., have not been used in the last year and are not reasonably expected to be used in the upcoming year), that have not been designated as waste, and that have not been set aside for defense purposes between 1993 and 1995. The "MIN Category Code" provides a code relating to the field that identifies the MIN category that the stored material belongs to (denoted by the "MIN Category" field). MIN material has been grouped into 10 identifying categories. Valid MIN categories include Chemicals, Depleted Uranium, Natural & Enriched Uranium, Lithium, Sodium, Lead, Plutonium, Spent Nuclear Fuel, Scrap Metal and Equipment, and Weapons Components.
MinMat	Facility	Information is from the January 1996 Materials in Inventory (MIN) database. For the purposes of the MIN initiative, materials in inventory were defined as those materials (1) not currently in use, i.e., as of January 1995 materials were not in use, had not been used in the last year, and were not reasonably expected to be used in the following year; were not designated as wastes; and (2) that had not been set aside by the Nuclear Weapons Council for defense purposes. The "Facility" field is the name of the facility (building) or site where the MIN material is stored. This may be a specific building at a site (i.e., "Building 7708") or a general description of a storage area (i.e., "site-wide" or "10 storage areas").

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Headquarters Programs	Information is from the January 1996 Materials in Inventory (MIN) database. For the purposes of the MIN initiative, materials in inventory were defined as those materials (1) not currently in use, i.e., as of January 1995 materials were not in use, had not been used in the last year, and were not reasonably expected to be used in the following year; were not designated as wastes; and (2) that had not been set aside by the Nuclear Weapons Council for defense purposes. The "Headquarters Programs" field identifies which DOE program (EM, DP, SC, etc.) is responsible for making recommendations for the Materials in Inventory.
	Inventory Amount	Information is from the January 1996 Materials in Inventory (MIN) database. For the purposes of the MIN initiative, materials in inventory were defined as those materials (1) not currently in use, i.e., as of January 1995 materials were not in use, had not been used in the last year, and were not reasonably expected to be used in the following year; were not designated as wastes; and (2) that had not been set aside by the Nuclear Weapons Council for defense purposes. The "Inventory Amount" field quantifies the amount of MIN material that is stored at the facility or site. Need to refer to the "Unit" field to determine what the unit of the stored material is (i.e., kilograms).
	Material Form	Information is from the January 1996 Materials in Inventory (MIN) database. For the purposes of the MIN initiative, materials in inventory were defined as those materials (1) not currently in use, i.e., as of January 1995 materials were not in use, had not been used in the last year, and were not reasonably expected to be used in the following year; were not designated as wastes; and (2) that had not been set aside by the Nuclear Weapons Council for defense purposes. The "Material Form" field describes the physical form of the stored MIN material. Examples include Solid, Flouride, Metal, Liquid, and Powder.
	Material ID	Information is from the January 1996 Materials in Inventory (MIN) database. For the purposes of the MIN initiative, materials in inventory were defined as those materials (1) not currently in use, i.e., as of January 1995 materials were not in use, had not been used in the last year, and were not reasonably expected to be used in the following year; were not designated as wastes; and (2) that had not been set aside by the Nuclear Weapons Council for defense purposes. The "Material Id" field is a unique identifier for each specific amount of MIN material at a facility or site. The "Material Id" is then associated with descriptions of the MIN material to which it is assigned, including an inventory amount, a MIN category, and a MIN subcategory.
	Material Name	Information is from the January 1996 Materials in Inventory (MIN) database. For the purposes of the MIN initiative, materials in inventory were defined as those materials (1) not currently in use, i.e., as of January 1995 materials were not in use, had not been used in the last year, and were not reasonably expected to be used in the following year; were not designated as wastes; and (2) that had not been set aside by the Nuclear Weapons Council for defense purposes. The "Material Name" field is the descriptive name of the MIN material. Examples include Thorium, Research Reactor Fuel, and Normal Uranium.
	MIN Category	Information is from the January 1996 Materials in Inventory (MIN) database. For the purposes of the MIN initiative, materials in inventory were defined as those materials (1) not currently in use, i.e., as of January 1995 materials were not in use, had not been used in the last year, and were not reasonably expected to be used in the following year; were not designated as wastes; and (2) that had not been set aside by the Nuclear Weapons Council for defense purposes. The "MIN Category" field identifies the MIN category that the stored material belongs to. MIN material has been grouped into 10 identifying categories. Valid MIN categories include Chemicals, Depleted Uranium, Natural & Enriched Uranium, Lithium, Sodium, Lead, Plutonium, Spent Nuclear Fuel, Scrap Metal and Equipment, and Weapons Components.
	MIN Subcategory	Information is from the January 1996 Materials in Inventory (MIN) database. For the purposes of the MIN initiative, materials in inventory were defined as those materials (1) not currently in use, i.e., as of January 1995 materials were not in use, had not been used in the last year, and were not reasonably expected to be used in the following year; were not designated as wastes; and (2) that had not been set aside by the Nuclear Weapons Council for defense purposes. The "MIN Subcategory" field identifies the MIN subcategory that the stored material belongs to. All MIN material belongs to one of 10 categories (identified through the "MIN Category" field) and one of 17 subcategories. The 17 MIN subcategories include Chemicals, Depleted Uranium Hexafluoride, Other Depleted Uranium, Highly Enriched Uranium, Low Enriched Uranium, Normal Uranium, Strategic Lithium, Virgin and Depleted Lithium, Sodium, NaK, Lead, Plutonium, Other NMMSS, Spent Nuclear Fuel, Scrap Metal, Precious Scrap Metal, and Weapons Components.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Radiologically Contaminated	Information is from the January 1996 Materials in Inventory (MIN) database. For the purposes of the MIN initiative, materials in inventory were defined as those materials (1) not currently in use, i.e., as of January 1995 materials were not in use, had not been used in the last year, and were not reasonably expected to be used in the following year; were not designated as wastes; and (2) that had not been set aside by the Nuclear Weapons Council for defense purposes. The "Radiologically Contaminated" field identifies whether or not the stored MIN material is radiologically contaminated. Valid descriptions include Yes, No, Nuclear Material, Not Reported, and Unknown.
	Site Number	Unique numeric code used to identify each site.
	Unit	Information is from the January 1996 Materials in Inventory (MIN) database. For the purposes of the MIN initiative, materials in inventory were defined as those materials (1) not currently in use, i.e., as of January 1995 materials were not in use, had not been used in the last year, and were not reasonably expected to be used in the following year; were not designated as wastes; and (2) that had not been set aside by the Nuclear Weapons Council for defense purposes. The "Unit" field provides the units (e.g., kilograms) associated with the amount of stored MIN material as defined in the "Inventory Amount" field (the "Inventory Amount" field quantifies the amount of MIN material that is stored at the facility or site).
Operations/Field Office	Field Office Long Description	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Field Office Long Description" field is a long description of the DOE Field Office responsible for the site and its operations. The first two digits of the Site Number identify the Field Office. The valid selections for Field Offices are: (01) Albuquerque Operations Office, (03) Chicago Operations Office, (04) Yucca Mountain Site Characterization Office, (05) Golden Field Office, (06) Idaho Operations Office, (07) Ohio Field Office, (09) Nevada Operations Office, (10) Oak Ridge Operations Office, (11) Federal Energy Technology Center, (12) Pittsburgh Naval Reactors Office, (13) Richland Operations Office, (14) Oakland Operations Office, (15) Savannah River Operations Office, (16) Schenectady Naval Reactors Office, (23) Southwestern Power Administration, (24) Western Area Power Administration, (26) Naval Petroleum Reserves, (27) Strategic Petroleum Reserves, and (42) Rocky Flats.
	Ops/Field Office Code	Code designating the DOE Operations/Field Office responsible for the site and its operations.
Orig_Material	Americium-241	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Americium-241" field denotes the percentage of the emplaced waste within the site area that is contaminated with the radionuclide Americium 241. Units for the radionuclide are denoted in the "Percent Key Radionuclide" field.
	Californium-252	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Californium-252" field denotes the percentage of the emplaced waste within the site area that is contaminated with the radionuclide Californium 252. Units for the radionuclide are denoted in the "Percent Key Radionuclide" field.
	Confidence Level	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Confidence Level" field denotes the Site's general confidence level in the waste information provided. Valid choices include (1) Low, (2) Medium, and (3) High.
	Curium-244	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Curium-244" field denotes the percentage of the emplaced waste within the site area that is contaminated with the radionuclide Curium 244. Units for the radionuclide are denoted in the "Percent Key Radionuclide" field.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Decayed Date	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Decayed Date" field denotes to what year the estimates of the key radionuclides (as denoted in the "Americium-241," "Plutonium-238," "Plutonium-239," etc. fields) were decayed to if "Decayed Values" was set to "Y" in the "Estimated Values" field.
	Soil Emplaced Volume	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Soil Emplaced Volume" field provides the estimated total volume of soil contaminated with the emplaced waste within the site area (solid or liquid) or past testing.
	Estimated Value Basis	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Estimated Value Basis" field provides an explanation of the basis for how the transuranic waste values were estimated for the "Total TRU Radionuclides" field and the "Americium-241," "Plutonium-238," "Plutonium-239," etc. fields. In addition, it provides an explanation of how the volumes were calculated for the "Total Volume Actual Waste Emplaced" and "Total Volume Containers Emplaced" fields.
	Estimated Values	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Estimated Values" field explains how the values of the key radionuclides (as denoted in the "Americium-241," "Plutonium-238," "Plutonium-239," etc. fields) were estimated. Valid choices include (1) Initial (emplaced values) and (2) Decayed Values.
	Heterogeneous Solids	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Heterogeneous Solids" field provides the estimated total volume of emplaced waste classified as heterogeneous solid within the site area.
	Homogeneous Solids	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Homogeneous Solids" field provides the estimated total volume of emplaced waste classified as homogeneous solid within the site area.
	Liquid	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Liquid" field provides the estimated total volume of emplaced waste classified as liquid within the site area.
	Managing Program Code	Two letter code designating the DOE program responsible for the site and its operations.
	Material Remarks	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Material Remarks" field provides an additional explanation of the chosen original material type.
	Origin	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Origin" field provides information on where the original transuranic waste material came from prior to burial within the site area.
	Other	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Other" field provides the estimated total volume of emplaced waste classified as other within the site area.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Percent Between 10-100 nCi/g	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Percent Between 10-100 nCi/g" field provides the percentage of the volume of the original actual waste (not including packaging) that was emplaced within the site area (denoted in the "Total Volume Actual Waste Emplaced" field) and the percentage of the volume of the containers of actual waste (including packaging) that was emplaced within the site area (denoted in the "Total Volume Containers Emplaced" field) between 10 nanocuries per gram and 100 nanocuries per gram.
	Percent Exceeding 100 nCi/g	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Percent Exceeding 100 nCi/g" field provides the percentage of the volume of the original actual waste (not including packaging) that was emplaced within the site area (denoted in the "Total Volume Actual Waste Emplaced" field) and the percentage of the volume of the containers of actual waste (including packaging) that was emplaced within the site area (denoted in the "Total Volume Containers Emplaced" field) exceeding 100 nanocuries per gram.
	Percent Between 10-100 nCi/g - Soil	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Percent Between 10-100 nCi/g" field provides the percentage of the estimated total volume of soil contaminated with the emplaced waste within the site area (solid or liquid) or past testing (denoted in the "Emplaced Volume" field) between 10 nanocuries per gram and 100 nanocuries per gram.
	Percent Exceeding 100 nCi/g - Soil	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Percent Exceeding 100 nCi/g - Soil" field provides the percentage of the estimated total volume of soil contaminated with the emplaced waste within the site area (solid or liquid) or past testing (denoted in the "Soil Emplaced Volume" field) exceeding 100 nanocuries per gram.
	Percent Key Radionuclide	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Percent Key Radionuclide" field provides the units the Site used for calculating the percent of key radionuclides in the volume of the actual waste (not including packaging) that was emplaced within the site area (denoted in the "Total Volume Actual Waste Emplaced" field) and the volume of the containers of actual waste (including packaging) that was emplaced within the site area (denoted in the "Total Volume Containers Emplaced" field). These units must be the same as those used to determine the "Units" field and are either in weight or curies (Ci). These units are used for the Site's calculations in the "Americium-241," "Plutonium-238," "Plutonium-239," etc. fields.
	Placement	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Placement" field provides information on how the transuranic waste was buried within the site area. Valid choices include (1) Trench/Pit Burial, (2) Greater Confinement Disposal (GCD), (3) Underground Injection, (4) Spill or Surface Discharge, (5) Surface Testing, (6) Underground Testing, and (7) Other.
	Placement Remarks	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Placement Remarks" field provides additional information on the site-specific type of burial of the transuranic waste coinciding with the selection of "Placement" field.
	Plutonium-238	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Plutonium-238" field denotes the percentage of the emplaced waste within the site area that is contaminated with the radionuclide Plutonium 238. Units for the radionuclide are denoted in the "Percent Key Radionuclide" field.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Plutonium-239	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Plutonium-239" field denotes the percentage of the emplaced waste within the site area that is contaminated with the radionuclide Plutonium 239. Units for the radionuclide are denoted in the "Percent Key Radionuclide" field.
	Plutonium-240	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Plutonium-240" field denotes the percentage of the emplaced waste within the site area that is contaminated with the radionuclide Plutonium 240. Units for the radionuclide are denoted in the "Percent Key Radionuclide" field.
	Plutonium-241	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Plutonium-241" field denotes the percentage of the emplaced waste within the site area that is contaminated with the radionuclide Plutonium 241. Units for the radionuclide are denoted in the "Percent Key Radionuclide" field.
	Plutonium-242	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Plutonium-242" field denotes the percentage of the emplaced waste within the site area that is contaminated with the radionuclide Plutonium 242. Units for the radionuclide are denoted in the "Percent Key Radionuclide" field.
	Radium-266	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Radium-266" field denotes the percentage of the emplaced waste within the site area that is contaminated with the radionuclide Radium 266. Units for the radionuclide are denoted in the "Percent Key Radionuclide" field.
	Site Number	Unique numeric code used to identify each site.
	Soil Basis Estimate	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Soil Basis Estimate" field provides an explanation of the basis for how the soil information (denoted in the "Soil Emplaced Volume," "Soil Volume Remarks," "Percent Exceeding 100 nCi/g - Soil," and "Percent Between 10-100 nCi/g - Soil" fields) was estimated, including supporting volume calculations and the report reference(s).
	Soil Confidence Level	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Soil Confidence Level" field denotes the Site's general confidence level in the soil information provided. Valid choices include (1) Low, (2) Medium, and (3) High.
	Soil Volume Remarks	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Soil Volume Remarks" field provides additional information pertaining to the estimated total volume of soil contaminated with the emplaced waste within the site area (solid or liquid) or past testing (as denoted in the "Soil Emplaced Volume" field).
	Solid Types	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Solid Types" field denotes whether or not the type of original emplaced material within the site area was in the form of soils, sludges, or particulates if the original material was denoted as a heterogeneous solid (i.e., the field entitled "Heterogeneous" was set to "Y").
	Total TRU Radionuclides	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Total TRU Radionuclides" field quantifies (through either a specific number or a high/low range) the total amount of transuranic waste radionuclides in the original material.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Total Volume Actual Waste Emplaced	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Total Volume Actual Waste Emplaced" field quantifies the total volume of the actual waste (not including packaging) that was emplaced within the site area in cubic meters.
	Total Volume Containers Emplaced	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Total Volume Containers Emplaced" field quantifies the total volumes of the containers of actual waste (including packaging) that was emplaced within the site area in cubic meters.
	TRU_ID	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "TRU ID" field provides a unique identifier for each record in the database. The "TRU ID" field is internal to the database for structure purposes and has not been provided by the Field/Operations Office.
	Units	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Units" field provides the units for the numeric value of the total amount of transuranic waste radionuclides in the original material (as denoted in the "Total TRU Radionuclides" field).
	Uranium-233	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Uranium-233" field denotes the percentage of the emplaced waste within the site area that is contaminated with the radionuclide Uranium 233. Units for the radionuclide are denoted in the "Percent Key Radionuclide" field.
	Volume Remarks	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Volume Remarks" field provides an explanation of how the volumes provided in the "Total Volume Actual Waste Emplaced" and "Total Volume Containers Emplaced" fields were estimated. Source citations and report references are also included in this explanation.
Reporting Period	Calendar Year	Information is from the Annual Report of Waste Generation and Pollution Prevention Progress. The Pollution Prevention Report presents and analyzes DOE complex-wide waste generation and pollution prevention activities at each reporting site. The number of reporting sites may change each year depending on whether a site meets the criteria for reporting hazardous waste. The "Calendar Year" field is the year during which the waste was generated. Waste Generation is any waste produced during the current calendar year. It does not include waste produced in previous years that is being re-packaged, treated, or disposed in the current year. It does include secondary wastes generated by the treatment, storage, or disposal of previously generated wastes.
	Reporting Period Code	Date code that represents the time/date the data was loaded into the system.
Site Table	DOE Site	Information is from the EM Corporate Database. The EM Corporate Database collects waste information by individual waste streams and includes information such as generators, volumes, transfers, disposition paths, and radionuclides. The "DOE Site" field indicates (Y/N) whether this site is an DOE geographic site.
	EM Site	Information is from the EM Corporate Database. The EM Corporate Database collects waste information by individual waste streams and includes information such as generators, volumes, transfers, disposition paths, and radionuclides. The "EM Site" field indicates (Y/N) whether this site is an EM geographic site.
	Geographic Site Category	Information is from the EM Corporate Database. The EM Corporate Database collects waste information by individual waste streams and includes information such as generators, volumes, transfers, disposition paths, and radionuclides. The "Geographic Site Category" field provides the categories used to identify the geographic site. The valid selections are: COMM (Commercial), N-DOE (Non-Reporting DOE Site), OTHER (Other), R-DOE (Reporting DOE Site), and TBD (To Be Determined).

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Geographic Site Shortname	Information is from the EM Corporate Database. The EM Corporate Database collects waste information by individual waste streams and includes information such as generators, volumes, transfers, disposition paths, and radionuclides. The "Geographic Site Shortname" field is an abbreviation for the geographic site (e.g., Ames).
	Geographic Site Type	Information is from the EM Corporate Database. The EM Corporate Database collects waste information by individual waste streams and includes information such as generators, volumes, transfers, disposition paths, and radionuclides. The "Geographic Site Type" is a code field for the geographic site type, where A=geographic site added for use in collected stream disposition data, L=large site, F=FUSRAP, O= small site, U=UMTRA, and S=small site.
	Ops/Field Office Code	Code designating the DOE Operations/Field Office responsible for the site and its operations.
	Site City	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Site City" field identifies the name of the city or town where the site is located. For leased properties, this also serves as the Lessee city.
	Site County	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Site County" field identifies the name of the county where the site is located. For leased properties, this also serves as the Lessee county.
	Site Excess Indicator Description	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Site Excess Indicator Description" field is an abbreviated description of the excess indicator code. The excess indicator code indicates whether a site is excess to the needs of the Department or tells the current status of the site. The valid selections are: Legislative (1), Holding Agency (2), Undisposible (3), Litigation (4), Contamination (5), Historical (6), Title Problems (7), Other (8), Excess (E), and Not Excess (N).
	Site Mailing Address	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Site Mailing Address" field identifies the street number and street name to which mail should be sent. For leased properties, this also serves as the Lessee address.
	Site Name	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Site Name" field identifies the name assigned to a site by DOE headquarters. This should be a contiguous geographic location.
	Site Number	Unique numeric code used to identify each site.
	Site Zip	Information is from the Facilities Information Management System (FIMS) database. For the purpose of the FIMS database, facilities are defined as buildings; land; other structures and facilities (OSFs); or trailers, modulars, and containers that are owned or leased by the Department. The "Site Zip" field identifies the primary zip code assigned to a site by the U.S. Postal Service. Stored value includes a 5-digit code (required) and a 4-digit extended code (optional).
	State Code	Two-letter code for the state in which the site is located.
State	State Code	Two-letter code for the state in which the site is located.
	State Name	Full text name of the state where the site is located.
supp_vol	Contaminated LLW Soil	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated LLW Soil" field provides the volume of low-level contaminated soil within the site area. Volumes are based on best estimates.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Contaminated MLLW Soil	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated MLLW Soil" field provides the volume of mixed low-level contaminated soil within the site area. Volumes are based on best estimates.
	Contaminated MTRU Soil	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated MTRU Soil" field provides the volume of mixed transuranic contaminated soil within the site area. Volumes are based on best estimates.
	Contaminated Soil Total	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated Soil Total" field provides the total volume of contaminated soil within the site area. Volumes are based on best estimates.
	Contaminated TRU Soil	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Contaminated TRU Soil" field provides the volume of transuranic contaminated soil within the site area. Volumes are based on best estimates.
	Emplaced Waste LLW	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste LLW" field provides the volume of emplaced low-level waste within the site area.
	Emplaced Waste MLLW	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste MLLW" field provides the volume of emplaced mixed low-level waste within the site area.
	Emplaced Waste MTRU	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste MTRU" field provides the volume of emplaced mixed transuranic waste within the site area.
	Emplaced Waste Total	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste Total" field provides the total volume of combined emplaced waste within the site area.
	Emplaced Waste TRU	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Emplaced Waste TRU" field provides the volume of emplaced transuranic waste within the site area.
	Heterogeneous Solid LLW	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Heterogeneous Solid LLW" field provides the volume of emplaced low-level heterogeneous solid waste within the site area.
	Heterogeneous Solid MLLW	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Heterogeneous Solid MLLW" field provides the volume of emplaced mixed low-level heterogeneous solid waste within the site area.
	Heterogeneous Solid MTRU	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Heterogeneous Solid MTRU" field provides the volume of emplaced mixed transuranic heterogeneous solid waste within the site area.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Heterogeneous Solid Total	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Heterogeneous Solid Total" field provides the total volume of emplaced heterogeneous solid waste within the site area.
	Heterogeneous Solid TRU	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Heterogeneous Solid TRU" field provides the volume of emplaced transuranic heterogeneous solid waste within the site area.
	Homogenous Solid LLW	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Homogenous Solid LLW" field provides the volume of emplaced low-level homogeneous solid waste within the site area.
	Homogenous Solid MLLW	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Homogenous Solid MLLW" field provides the volume of emplaced mixed low-level homogeneous solid waste within the site area.
	Homogenous Solid MTRU	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Homogenous Solid MTRU" field provides the volume of mixed transuranic homogeneous solid waste within the site area.
	Homogenous Solid Total	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Homogenous Solid Total" field provides the total volume of emplaced homogeneous solid waste within the site area.
	Homogenous Solid TRU	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Homogenous Solid TRU" field provides the volume of emplaced transuranic homogeneous solid waste within the site area.
	Liquid LLW Waste	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Liquid LLW Waste" field provides the volume of emplaced liquid low-level waste within the site area.
	Liquid MLLW Waste	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Liquid MLLW Waste" field provides the volume of emplaced liquid mixed low-level waste within the site area.
	Liquid MTRU Waste	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Liquid MTRU Waste" field provides the volume of emplaced liquid mixed transuranic waste within the site area.
	Liquid TRU Waste	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Liquid TRU Waste" field provides the volume of emplaced liquid transuranic waste within the site area.
	Liquid Waste Total	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Liquid Waste Total" field provides the total volume of emplaced liquid waste within the site area.
	Maximum LLW Estimate	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Maximum LLW Estimate" field provides the maximum low-level volume estimate for the designated site area.
	Maximum MLLW Estimate	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Maximum MLLW Estimate" field provides the maximum mixed low-level volume estimate for the designated site area.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Maximum MTRU Estimate	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Maximum MTRU Estimate" field provides the maximum mixed transuranic volume estimate for the designated site area.
	Maximum Total Estimate	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Maximum Total Estimate" field provides the maximum total volume estimate for the designated site area.
	Maximum TRU Estimate	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Maximum TRU Estimate" field provides the maximum transuranic volume estimate for the designated site area.
	Minimum LLW Estimate	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Minimum LLW Estimate" field provides the minimum low-level volume estimate for the designated site area.
	Minimum MLLW Estimate	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Minimum MLLW Estimate" field provides the minimum mixed low-level volume estimate for the designated site area.
	Minimum MTRU Estimate	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Minimum MTRU Estimate" field provides the minimum mixed transuranic volume estimate for the designated site area.
	Minimum Total Estimate	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Minimum Total Estimate" field provides the minimum total volume estimate for the designated site area.
	Minimum TRU Estimate	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Minimum TRU Estimate" field provides the minimum transuranic volume estimate for the designated site area.
	Other LLW	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Other LLW" field provides the volume of emplaced other low level waste within the site area.
	Other MLLW	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Other MLLW" field provides the volume of emplaced other mixed low level waste within the site area.
	Other MTRU	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Other MTRU" field provides the volume of emplaced other mixed transuranic waste within the site area.
	Other Total	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Other LLW" field provides the total volume all "other" emplaced waste within the site area.
	Other TRU	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Other TRU" field provides the volume of emplaced other transuranic waste within the site area.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Volumes	Information is from the Buried Transuranic Waste Database. The Buried Transuranic Waste Database stores information on DOE's buried transuranic waste including volumes, type of burial, radionuclide percentage, and anticipated response actions. The "Volumes" field provides an explanation of what waste volume estimate the calculations for the volume fields (i.e., the "Emplaced Waste Total," "Liquid TRU Waste," "Heterogeneous MTRU Soil," "Contaminated MLLW Soil," etc. fields) were based on. The two options are (1) the total cubic meters of actual waste emplaced within the site area (not including packaging materials) (denoted in the "Total Volume Actual Waste Emplaced" field) or (2) the total cubic meters of containers emplaced within the site area (including packaging materials) (as denoted in the "Total Volume Containers Emplaced" field).
tbl Chemical Release On Site	Reporting Year	TRI data is reported to DOE every year. This field designates the year in which the TRI data in this table was collected. As such, it is a primary key so each TRI set has an appropriate year.
	Chemical Name	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Chemical Name" field gives the name of the toxic chemical that has been released and/or transferred during the reporting year. Listed toxic chemicals are those chemicals on the list in Committee Print Number 99-169 of the Senate Committee on Environment and Public Works, titled "Toxic Chemicals Subject to Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986" (42 U.S.C. 11023). Currently, there are over 600 toxic chemicals included on the list subject to reporting.
	Discharges to Receiving Streams or Water Bodies	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Discharges to Receiving Streams or Water Bodies" field provides the quantity of a toxic chemical or mixture containing a toxic chemical directly discharged into a stream or other water bodies.
	Fugitive or Non-Point Air Emissions	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Fugitive or non-Point Air Emissions" field provides the quantity of a toxic chemical or mixture containing a toxic chemical released through fugitive or non-point air emissions that occur through (1) equipment leaks from valves, pump seals, flanges, compressors, sampling connections, and open-ended lines, etc.; (2) evaporative losses from surface impoundments and spills; (3) releases from building ventilation systems; and (4) any other fugitive or non-point air emissions.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Land Release	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Land Release" field provides the total quantity of a toxic chemical or mixture containing a toxic chemical released to land within the boundaries of the facility. Information represents five subcategories including (1) RCRA Subtitle C landfills (typically, the ultimate disposal method for hazardous waste is landfilling in these types of landfills); (2) Other landfills (landfills other than RCRA Subtitle C landfills); (3) Land treatment/application farming (disposal method in which a waste containing a listed toxic chemical is applied onto or incorporated into soil); (4) Surface impoundment (a natural topographic depression, man made excavation, or diked area formed primarily of earthen materials (although some may be lined with man-made materials) which is designed to hold an accumulation of liquid wastes or wastes containing free liquids); and (5) Other Disposal (any release to land that does not fit the categories of landfills, land treatment, or surface impoundment). Other Disposal includes any spills or leaks of listed toxic chemicals to land.
	On-site Underground Injection	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "On-site Underground Injection " field provides the quantity of a toxic chemical or mixture containing a toxic chemical injected to underground on-site to class I-V wells.
	Stack or Point Air Emissions	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Stack or Point Air Emissions" field provides the quantity of a toxic chemical or mixture containing a toxic chemical released through stack or point air emissions that occur through stacks, vents, ducts, pipes, or other confined air streams. Also includes storage tank emissions and air releases from air pollution control equipment.
tbl Off-Site Transfer	Reporting Year	TRI data is reported to DOE every year. This field designates the year in which the TRI data in this table was collected. As such, it is a primary key so each TRI set has an appropriate year.
	Chemical Name	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Chemical Name" field gives the name of the toxic chemical that has been released and/or transferred during the reporting year. Listed toxic chemicals are those chemicals on the list in Committee Print Number 99-169 of the Senate Committee on Environment and Public Works, titled "Toxic Chemicals Subject to Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986" (42 U.S.C. 11023). Currently, there are over 600 toxic chemicals included on the list subject to reporting.
	Site Number	Unique numeric code used to identify each site.
	Total Transfers Other	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Total Transfers Other" field provides an estimate of the total amount, in pounds, of a toxic chemical or mixture containing a toxic chemical that is transferred for the purposes of waste treatment, disposal, recycling, or energy recovery.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Total Transfers to Publicly Owned Treatment Works	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Total Transfers to Publicly Owned Treatment Works" field provides the total amount, in pounds, of a toxic chemical or mixture containing a toxic chemical that is contained in the wastewaters transferred to all POTWs (Publicly Owned Treatment Works).
tbl Releases and Waste Management Activities	Reporting Year	TRI data is reported to DOE every year. This field designates the year in which the TRI data in this table was collected. As such, it is a primary key so each TRI set has an appropriate year.
	Chemical Name	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Chemical Name" field gives the name of the toxic chemical that has been released and/or transferred during the reporting year. Listed toxic chemicals are those chemicals on the list in Committee Print Number 99-169 of the Senate Committee on Environment and Public Works, titled "Toxic Chemicals Subject to Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986" (42 U.S.C. 11023). Currently, there are over 600 toxic chemicals included on the list subject to reporting.
	Quantity Offsite Energy Recovery	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Quantity Offsite Energy Recovery" field gives the quantity of the toxic chemical or mixture containing a toxic chemical that is used for energy recovery offsite. Offsite energy recovery is the combustion of a residual material containing a TRI toxic chemical when (1) the combustion unit is integrated into an energy recovery system (i.e., industrial furnaces, industrial kilns, and boilers) and (2) the toxic chemical is combustible and has a heating value high enough to sustain combustion (under RCRA this is considered to be -5000 BTU).
	Quantity Onsite Energy Recovery	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Quantity Onsite Energy Recovery" field gives the quantity of the toxic chemical or mixture containing a toxic chemical that is used for energy recovery onsite. Onsite energy recovery is the combustion of a residual material containing a TRI toxic chemical when (1) the combustion unit is integrated into an energy recovery system (i.e., industrial furnaces, industrial kilns, and boilers) and (2) the toxic chemical is combustible and has a heating value high enough to sustain combustion (under RCRA this is considered to be -5000 BTU).
	Quantity Recycled Offsite	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Quantity Recycled Offsite" field gives the quantity of the toxic chemical or mixture containing a toxic chemical that is transferred offsite for recycling.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Quantity Recycled Onsite	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Quantity Recycled Onsite" field gives the quantity of the toxic chemical or mixture containing a toxic chemical that is recycled onsite.
	Quantity Released EPCRA	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Quantity Released EPCRA " field provides the total quantity released, including both on and off site disposal. It does not include any quantity treated onsite or reported as offsite treatment, recycling or energy recovery. It also excludes quantities due to remedial actions, catastrophic events or non-production related events.
	Quantity Released Non-Production	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Quantity Released Non-Production" field gives the quantity of the toxic chemical or mixture containing a toxic chemical released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year).
	Quantity Treated Offsite	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Quantity Treated Offsite" field gives the quantity of the toxic chemical (except for metals and metal compounds) or mixture containing a toxic chemical that is sent to a POTW (Publicly Owned Treatment Works) or other off-site location for waste treatment.
	Quantity Treated Onsite	Information is from the Toxic Chemical Release Inventory annual report. The Toxic Chemical Release Inventory, as implemented through the Emergency Planning Community and Right-to-Know Act (EPCRA), tracks the releases and waste management activities, including off-site transfers for treatment and disposal, of a list of toxic chemicals throughout the DOE complex. Section 8 of Form R (the reporting form for TRI) was implemented as a result of the Pollution Prevention Act. The "Quantity Treated Onsite" field gives the quantity of the toxic chemical (except for metals and metal compounds) or mixture containing a toxic chemical that is treated onsite.
tblcsowastegeneration	Calendar Year	Information is from the Annual Report of Waste Generation and Pollution Prevention Progress. The Pollution Prevention Report presents and analyzes DOE complex-wide waste generation and pollution prevention activities at each reporting site. The number of reporting sites may change each year depending on whether a site meets the criteria for reporting hazardous waste. The "Calendar Year" field is the year during which the waste was generated. Waste Generation is any waste produced during the current calendar year. It does not include waste produced in previous years that is being re-packaged, treated, or disposed in the current year. It does include secondary wastes generated by the treatment, storage, or disposal of previously generated wastes.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Non-Routine RCRA Waste	Information is from the Annual Report of Waste Generation and Pollution Prevention Progress. The Pollution Prevention Report presents and analyzes DOE complex-wide waste generation and pollution prevention activities at each reporting site. The number of reporting sites may change each year depending on whether a site meets the criteria for reporting hazardous waste. The "Non-Routine RCRA Waste" field contains volumetric data (in metric tons) for cleanup/stabilization RCRA wastes. Cleanup/stabilization waste consists of one-time operations waste produced by environmental restoration program activities, including primary and secondary wastes associated with retrieval and remediation operations; "legacy wastes;" and wastes from decontamination and decommissioning/transition operations. Resource Conservation and Recovery Act waste includes solid waste, not specifically excluded from regulation under 40 CFR 261.4, or delisted by petition, that is either a listed hazardous waste (40 CFR 261.30-261.33) or exhibits the characteristics of a hazardous waste (40 CFR 261.20-261.24).
	Non-Routine State Waste	Information is from the Annual Report of Waste Generation and Pollution Prevention Progress. The Pollution Prevention Report presents and analyzes DOE complex-wide waste generation and pollution prevention activities at each reporting site. The number of reporting sites may change each year depending on whether a site meets the criteria for reporting hazardous waste. The "Non-Routine State Waste" field contains volumetric data (in metric tons) for cleanup/stabilization state-regulated waste. Cleanup/stabilization waste consists of one-time operations waste produced by environmental restoration program activities, including primary and secondary wastes associated with retrieval and remediation operations; "legacy wastes;" and wastes from decontamination and decommissioning/transition operations. State regulated waste is any other hazardous waste not specifically regulated under RCRA, which may be regulated by State or local authorities.
	Non-Routine TSCA Waste	Information is from the Annual Report of Waste Generation and Pollution Prevention Progress. The Pollution Prevention Report presents and analyzes DOE complex-wide waste generation and pollution prevention activities at each reporting site. The number of reporting sites may change each year depending on whether a site meets the criteria for reporting hazardous waste. The "Non-Routine TSCA Waste" field contains volumetric data (in metric tons) for Cleanup/stabilization TSCA waste. Cleanup/stabilization waste consists of one-time operations waste produced by environmental restoration program activities, including primary and secondary wastes associated with retrieval and remediation operations; "legacy wastes;" and wastes from contamination and decommissioning/transition operations. TSCA waste includes individual chemical wastes (both solid and liquid), which are regulated by the Toxic Substances Control Act (TSCA)
	Routine RCRA Waste	Information is from the Annual Report of Waste Generation and Pollution Prevention Progress. The Pollution Prevention Report presents and analyzes DOE complex-wide waste generation and pollution prevention activities at each reporting site. The number of reporting sites may change each year depending on whether a site meets the criteria for reporting hazardous waste. The "Routine RCRA Waste" field contains volumetric data (in metric tons) for routine RCRA waste. Routine waste is produced by any type of production, analytical, and/or research and development laboratory operations; treatment, storage, or disposal operations; "work-for-others;" or any other periodic and recurring work that is considered ongoing. "Normal Operations" refers to the type of ongoing process (e.g., production) not to the specific activity that produced the waste. Resource Conservation and Recovery Act waste includes solid waste, not specifically excluded from regulation under 40 CFR 261.4, or delisted by petition, that is either a listed hazardous waste (40 CFR 261.30-261.33) or exhibits the characteristics of a hazardous waste (40 CFR 261.20-261.24).
	Routine State Waste	Information is from the Annual Report of Waste Generation and Pollution Prevention Progress. The Pollution Prevention Report presents and analyzes DOE complex-wide waste generation and pollution prevention activities at each reporting site. The number of reporting sites may change each year depending on whether a site meets the criteria for reporting hazardous waste. The "Routine State Waste" field contains volumetric data (in metric tons) for Routine State-regulated waste. Routine Waste is "normal operations" waste produced by any type of production, analytical, and/or research and development laboratory operations; treatment, storage, or disposal operations; "work-for-others;" or any other periodic and recurring work that is considered ongoing. "Normal Operations" refers to the type of ongoing process (e.g., production) not to the specific activity that produced the waste. State regulated waste is any other hazardous waste not specifically regulated under RCRA, which may be regulated by State or local authorities.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Routine TSCA Waste	Information is from the Annual Report of Waste Generation and Pollution Prevention Progress. The Pollution Prevention Report presents and analyzes DOE complex-wide waste generation and pollution prevention activities at each reporting site. The number of reporting sites may change each year depending on whether a site meets the criteria for reporting hazardous waste. The "Routine TSCA Waste" field contains volumetric data (in metric tons) for Routine TSCA waste. Routine Waste is "normal operations" waste produced by any type of production, analytical, and/or research and development laboratory operations; treatment, storage, or disposal operations; "work-for-others;" or any other periodic and recurring work that is considered ongoing. "Normal Operations" refers to the type of ongoing process (e.g., production) not to the specific activity that produced the waste. TSCA waste includes individual chemical wastes (both solid and liquid), which are regulated by the Toxic Substances Control Act (TSCA).
	Site Number	Unique numeric code used to identify each site.
tblrecycle	Calendar Year	Information is from the Annual Report of Waste Generation and Pollution Prevention Progress. The Pollution Prevention Report presents and analyzes DOE complex-wide waste generation and pollution prevention activities at each reporting site. The number of reporting sites may change each year depending on whether a site meets the criteria for reporting hazardous waste. The "Calendar Year" field is the year during which the waste was generated. Waste Generation is any waste produced during the current calendar year. It does not include waste produced in previous years that is being re-packaged, treated, or disposed in the current year. It does include secondary wastes generated by the treatment, storage, or disposal of previously generated wastes.
	Non-Routine Sanitary Waste	Information is from the Annual Report of Waste Generation and Pollution Prevention Progress. The Pollution Prevention Report presents and analyzes DOE complex-wide waste generation and pollution prevention activities at each reporting site. The number of reporting sites may change each year depending on whether a site meets the criteria for reporting hazardous waste. The "Non-Routine Sanitary Waste" field contains volumetric data (in metric tons) for sanitary waste attributed to cleanup/stabilization operations. Sanitary Waste is waste, such as garbage, that is generated by normal housekeeping activities and are not hazardous or radioactive. Cleanup/stabilization operations encompass a complex range of activities including environmental restoration of contaminated media; stabilization of nuclear and non-nuclear materials; and deactivation and decommissioning of facilities.
	Routine Sanitary Waste	Information is from the Annual Report of Waste Generation and Pollution Prevention Progress. The Pollution Prevention Report presents and analyzes DOE complex-wide waste generation and pollution prevention activities at each reporting site. The number of reporting sites may change each year depending on whether a site meets the criteria for reporting hazardous waste. The "Routine Sanitary Waste" field contains volumetric data (in metric tons) for sanitary waste attributed to routine operations. Sanitary Waste is waste, such as garbage, that is generated by normal housekeeping activities and are not hazardous or radioactive. Routine Operations refers to the type of ongoing process (e.g., production) not to the specific activity that produced the waste.
tSNFStream_FuelType	Fuel Type Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Fuel Type Name" field provides a description of the fuel type along with the fuel type name.
	Waste Stream Code	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Code" is a unique identifier associated with each specific stream.
tSNFStream_Location	SNF Location Inventory Percent	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "SNF Location Inventory Percent" field provides the percentage of current spent nuclear fuel inventory at a specified location.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Site Location ID	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Site Location ID" field provides a code relating to where in the facility the fuel element is located (choices include reactor, pool, vault, etc.).
	Waste Stream Code	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Code" is a unique identifier associated with each specific stream.
tSNFStream_SourceReactor	Reactor Inventory Percent	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Reactor Inventory Percent" field provides the percentage of inventory stream that is generated from a source reactor plus the percentage of the current inventory that was irradiated in the specified reactor.
	LCAdd Percent	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "LCAdd Percent" field provides the percentage of the specified lifecycle projected generation that will be irradiated in the specified source reactor.
	Reactor ID	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Reactor ID" field provides a code relating to the reactor where the fuel element was irradiated.
	Waste Stream Code	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Code" is a unique identifier associated with each specific stream.
tWasteStreamHeader	Contaminated Media Volume	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Contaminated Media Volume" field provides the current estimate of in-place media volume for media streams that are managed in-situ and for waste streams that result from remedial action and D&D activities. The units for the volumes are identified in the "Units Name" field.
	Contaminated Media Volume Lower Limit	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Contaminated Media Volume Lower Limit" field provides the current lower limit of the estimate of in-place media volume for media streams that are managed in-situ and for waste streams that result from remedial action or D&D activities.
	Contaminated Media Volume Upper Limit	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Contaminated Media Volume Upper Limit" field provides the current upper limit of the estimate of in-place media volume for media streams that are managed in-situ and for waste streams that result from remedial action or D&D activities.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	ER_Approved_Volume	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "ER_Approved_Volume" field provides the portion of lifecycle disposition volume of waste or contaminated media streams resulting from remedial action or D&D activities that is addressed by one, or more, approved decision documents.
	ER_Future_Volume_Avg	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "ER_Future_Volume_Avg" field provides the average portion of lifecycle disposition volume of waste streams resulting from remedial action or D&D activities to be addressed by future decision documents.
	ER_Future_Volume_UL	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "ER_Future_Volume_UL" field provides the upper limit to the portion of lifecycle disposition volume of waste streams resulting from remedial action or D&D activities to be addressed by future decision documents.
	ER_Future_Volume_LL	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "ER_Future_Volume_LL" field provides the lower limit to the portion of lifecycle disposition volume of waste streams resulting from remedial action or D&D activities to be addressed by future decision documents.
	Fate Narrative	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Fate Narrative" field is an optional field used to provide additional comment on the disposition of remedial action and D&D streams.
	Generating Program	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Generating Program" field provides the name of the DOE Program responsible for the generation of the waste.
	Generating Site	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Generating Site" field provides the name of the site responsible for the generation of the waste
	Is In-Situ Stream	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Is In-Situ Stream" field indicates (Y/N) if the stream is a contaminated media stream that will be managed in place.
	Is Ex-Situ Stream	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Is Ex-Situ Stream" field indicates (Y/N) if the stream is a contaminated media stream that will be managed ex-situ.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	MPC Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "MPC Name" field identifies the physical/chemical form of the stream (examples include "soil/gravel," "liquids," "heterogeneous debris," and "elemental mercury"). MPC stands for matrix parameter category, and is the overall category of the stream per the DOE Waste Treatability Group Guidance (DOE/LLW-217).
	Parent Waste Stream Code	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. If applicable, the "Parent Waste Stream Code" field identifies the stream that accounts for the annual disposition (i.e., work-off) quantities.
	Site Number	Unique numeric code used to identify each site.
	SNF Conversion Factor	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "SNF Conversion Factor" field provides the factor for converting spent nuclear fuel stream quantities reported as metric tons heavy metal to cubic meters.
	Stream Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Stream Name" field provides the name of the waste stream.
	Total Activity Curies	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Total Activity Curies" field provides the total estimated number of curies associated with the waste stream.
	Unit Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Unit Name" field provides the units of measurement associated with the stream quantities.
	Waste Stream Code	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Code" is a unique identifier associated with each specific stream.
	Waste Type Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Type Name" field denotes the general radiological classification of the stream (e.g., High Level Waste, Transuranic Waste, Low Level Waste).
tWS_Variance	Site Number	Two-letter code for the state in which the site is located.
	Waste Stream Var Narrative - Prior Year	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Var Narrative - Prior Year" field is a narrative used to explain changes in volume for the prior year.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Waste Stream Var Narrative - Lifecycle	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Var Narrative - Lifecycle" is a narrative used to explain changes in volumes for the lifecycle of the stream.
tWS_Activity_Annual	Yearbase	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Yearbase" field identifies the year or range of years associated with the stream quantities.
	Waste Stream Code	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Code" is a unique identifier associated with each specific waste stream.
	Quantity	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Quantity" field provides the quantity of the stream that was added, dispositioned, or in storage during the specified year or range of years.
	Disposition Managing Program	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Disposition Managing Program" field provides the name of the managing program that is responsible for the waste stream being dispositioned.
	Inventory Managing Program	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Inventory Managing Program" field provides the name of the managing program that is responsible for the waste stream being stored.
	SNF_Fnl_Treat_Qty	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "SNF_Fnl_Treat_Qty" field provides the quantity of the stream that was designated for final treatment during the specified year or range of years.
tWS_Activity_Header	Waste Stream Code	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Code" is a unique identifier associated with each specific waste stream.
	Facility Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Facility Name" field provides the name of the facility which houses the treatment, storage or disposal systems.
	Geographic Site Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Geographic Site Name" field provides the official name for the geographic site.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
tWS_Contaminant_Profile	Contaminant Basis Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants) volumes (i.e., inventory, projected generation and work-off), and details that describe the source and disposition path, and details that describe the source and disposition path. The "Contaminant Basis Name" field provides the primary basis on how the presence and/or concentration of the radiological and non-radiological, hazardous contaminants were identified (examples include "sampling and analysis" and "process knowledge") and the confidence in the information (examples include "high confidence" and "limited confidence").
	Density	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants) volumes (i.e., inventory, projected generation and work-off), and details that describe the source and disposition path, and details that describe the source and disposition path. The "Density" field provides the density of the waste or material in the waste stream needed to convert the isotope or contaminants into standard concentration units.
	Density Units	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants) volumes (i.e., inventory, projected generation and work-off), and details that describe the source and disposition path, and details that describe the source and disposition path. The "Density Units" field provides the unit of measurement used for converting density measurements to standard concentrations.
	Profile Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Profile Name" field provides the name assigned to the waste substream by the field.
	Stream Percent	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Stream Percent" field provides the amount of lifecycle stream volume that is represented by the specified contaminant profile.
	Waste Stream Code	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Code" is a unique identifier associated with each specific waste stream.
tWS_HAZ_Contaminant	Hazardous Contaminant Concentration Average	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Hazardous Contaminant Concentration Average" field provides the average concentration of the non-radiological, hazardous contaminant, if known. Units for the concentration are provided in the associated "Units Name" field.
	Hazardous Contaminant Concentration Lower Limit	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Hazardous Contaminant Concentration Lower Limit" field provides the lower limit for the non-radiological, hazardous contaminant concentration, if known. Units for the concentration are provided in the associated "Units Name" field.
	Hazardous Contaminant Concentration Upper Limit	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Hazardous Contaminant Concentration Upper Limit" field provides the upper limit for the non-radiological, hazardous contaminant concentration, if known. Units for the concentration are provided in the associated "Units Name" field.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Hazardous Contaminant Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Hazardous Contaminant Name" field identifies the name or type of a non-radiological, hazardous contaminant in the stream.
	Profile Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Profile Name" field provides the name assigned to the waste substream by the field.
	Unit Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Unit Name" field provides the unit of measurement in which the non-radiological, hazardous concentration value(s) are reported.
	Waste Stream Code	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Code" is a unique identifier associated with each specific waste stream.
tWS_Isotope	Isotope Concentration Average	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Isotope Concentration Average" field provides the average concentration of the radiological contaminant, if known. Units for the concentration are provided in the associated "Unit Name" field.
	Isotope Concentration Lower Limit	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Isotope Concentration Lower Limit" field provides the lower limit for the radiological contaminant concentration, if known. Units for the concentration are provided in the associated "Unit Name" field.
	Isotope Concentration Upper Limit	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Isotope Concentration Upper Limit" field provides the upper limit for the radiological contaminant concentration, if known. Units for the concentration are provided in the associated "Unit Name" field.
	Isotope Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Isotope Name" field identifies, or indicates, the type of radiological contaminant in the stream.
	Profile Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Profile Name" field provides the name assigned to the waste substream by the field.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Unit Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Unit Name" field provides the unit of measurement in which the radiological contaminant concentration value(s) are reported.
	Waste Stream Code	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Code" is a unique identifier associated with each specific waste stream.
txFacility	Existing or Planned	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Existing or Planned" field identifies whether the treatment/disposal system is in existence or planned to be built. An existing facility is one that has been or is currently being built.
	Facility ID	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Facility Id" field provides a unique code associated with the name of a specific treatment/disposal system.
	Facility Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Facility Name" field provides the name of a specific treatment/disposal system.
	Facility Owner	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Facility Owner" field identifies whether the treatment/disposal system is DOE or commercially owned/operated.
	Geographic Site Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Geographic Site Name" field identifies the geographic site where the treatment/disposal system is located.
	Managing Program Code	Two letter code designating the DOE program responsible for the site and its operations.
	Planned Closure Date	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Planned Closure Date" provides information on the anticipated closure date of the treatment/disposal facility.
	Planned Operational Date	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Planned Operational Date" provides the anticipated operational date for a planned or non-operational treatment/disposal system.
	Technology Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Technology Name" field provides the general name of the technology utilized at the treatment/disposal system.

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
txSNF_Reactor	Reactor City	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The “Reactor City” field provides the name of the city where the irradiating reactor, for the fuel unit, is located.
	Reactor Country	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The “Reactor Country” field provides the name of the country where the irradiating reactor, for the fuel unit, is located.
	Reactor ID	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The “Reactor ID” field provides a code relating to the reactor where the fuel element was irradiated.
	Reactor Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The “Reactor Name” field provides the name of the reactor where the fuel element was irradiated.
	Reactor State	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The “Reactor State” field provides the name of the state where the irradiating reactor, for the fuel unit, is located.
txSNF_SiteLocation	SNF Facility Abbreviation	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The “SNF Facility Abbreviation” field provides the abbreviation of where in the facility the fuel element is located (choices include reactor, pool, vault, etc.).
	SNF Facility Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The “SNF Facility Name” field provides where in the facility the fuel element is located (choices include reactor, pool, vault, etc.).
	SNF Site Facility ID	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The “SNF Site Facility ID” field provides a code relating to the facility where the fuel element is currently located.
	SNF Site Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The “SNF Site Name” field provides the name of the site where the fuel element is currently located.
txWS_Activity	Flow Type	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The “Flow Type” field categorizes a management activity as an addition, disposition, or inventory (storage).

Appendix B - Central Internet Database Logical Data Dictionary

Table Name	Data Element Name	Definition
	Waste Stream Activity Category Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Activity Category Name" field provides the management activity category name (examples include "Disposal," "Recycle," "Generation," "Treatment," etc.).
	Waste Stream Activity Code	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Activity Code" field provides a unique code associated with the current management activity (e.g., new generation, treatment, disposal, storage) (denoted in the "Waste Stream Activity Name" field).
	Waste Stream Activity Name	Information is from the EM Corporate Database. The EM Corporate Database maintains data on waste, media, and material streams. Specific data on the streams includes characteristics (e.g., radiological and non-radiological contaminants), volumes, (i.e., inventory, projected generation, and work-off), and details that describe the source and disposition path. The "Waste Stream Activity Name" field provides the current management activity (e.g., new generation, treatment, disposal, storage).

Appendix C

List of Web Sites to be Linked to the Central Internet Database

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Headquarters Information			
I. (A) DOE Offices/Divisions			
Web Site Name	Owner	URL	Description
Environment, Safety and Health Information Portal	Office of Environment, Health and Safety	www.eh.doe.gov	DOE Office of Environment Safety and Health Home Page provides sections on DOE's role in the community, including an on-line Community Resource Center containing access to Environment, Safety and Health policies, technical studies, document collections, and research opportunities, program expert directories and Environment Safety and Health topics such as integrated safety management and ES&H site performance analyses. An on-line form is included for users to directly submit suggestions for improving the web site.
DOE Office of Worker and Community Transition Home Page	Office of Worker and Community Transition	www.wct.doe.gov	DOE Office of Worker and Community Transition Home Page includes quantitative evaluations of major program areas within the Office, a comprehensive library/information resource outlining worker and community transition and site specific accomplishments affecting work force restructuring across the DOE.
DOE Environmental Management	Office of Environmental Management	www.em.doe.gov	DOE Environmental Management Home Page addresses major focus areas such as waste management, environmental restoration, nuclear materials and facility stabilization, along with cross cutting programs such as the DOE Environmental Management Benchmarking Clearinghouse, and agency regulatory and budget information.
DOE Office of Defense Programs	Office of Defense Programs	www.dp.doe.gov	DOE Office of Defense Programs Home Page outlines Defense Program News and Highlights, along with providing resources such as DOE Directives and National Environmental Policy Act activities, agency organizational charts, and a list of recent developments within the Office.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
DOE Office of Nuclear Energy, Science and Technology	Office of Nuclear Science and Technology	www.ne.doe.gov	DOE Office of Nuclear Science and Technology Home Page contains organizational charts, program offices, press releases, public information, Site Advisory Committee news and reports, and related web links.
DOE Office of Science	Office of Science	www.er.doe.gov	DOE Office of Science Home Page includes information on Office of Science Information and News, Lab and Grant Information, current science programs, and supporting organizations of the DOE Office of Science.
DOE Office of Science and Technical Information	Office of Science and Technical Information	www.osti.gov	DOE Office of Science and Technical Information Home Page includes OSTI initiatives such as web applications and electronic infrastructure redesign, web site links, speeches and papers, information resources such as mission specific products and DOE wide information systems, and OSTI stakeholder, program and partnership information.
DOE Main Home Page	Department of Energy	www.doe.gov	Department of Energy Home Page provides access to featured sites, Department highlights, explanations of primary focus areas such national security and environmental quality, and links to other Federal sites, along with Field and Regional Operations Offices, National Laboratories and Program Headquarters.
I. (B) Databases			
Integrated Data Base Report	Office of Waste Management	www.em.doe.gov/em30/idrpts.html	Provides data on current and projected inventories and characteristics of permanently discharged domestic SNF and radioactive wastes.
Paths to Closure Data Reporting Tool	DOE Headquarters	http://doe-web-rpt.em.doe.gov/	Reporting of Paths to Closure information on PBS level.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
July 1999 Detailed Disposition Maps	Office of Environmental Management	http://emi-web.inel.gov/dmaps.html	Contains detailed Disposition Maps for each Operations Office based on the July 1999 Stream Disposition Data. Please note that the Central Internet Database is populated with the December 1999 Stream Disposition Data, so there may be minor differences between these maps and the information currently found in the CID. However, these differences should not be significant.
II. DOE Field Office Information			
II. (A) DOE Field Offices			
Sandia National Laboratories California	Sandia National Laboratories	www.ca.sandia.gov	Contains information on site-specific research, development and application areas, such as combustion, information systems, materials and proliferation, and corporate programs such as energy and the environment, that address issues such as environmental legacy wastes and nuclear energy research.
Energy Technology Engineering Center	DOE Office of Environmental Management	www.em.doe.gov/rte1994/etec.html	Site-specific waste treatment plan, mission and background are discussed
General Atomics Site	General Atomics	www.ga.com	Information on General Atomics (GA) nuclear energy and technology focus areas along with descriptions of practice groups and links to related sites.
Laboratory for Energy Related Health Research	DOE	www.oak.doe.gov/DIVISIONS/LEHR/index.htm	Provides information on site description and history, LEHR environmental restoration project, technology deployments, and archive of site documents and documents available for public comment.
Ernest Orlando Lawrence Berkeley National Laboratory	Lawrence Berkeley National Laboratory	www.lbl.gov	Information on scientific programs at the Laboratory, technology transfer, lab publications and University of California, DOE and other government links.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
Lawrence Livermore National Laboratory- Main Site	Lawrence Livermore National Laboratory	www.llnl.gov	Information provided on industrial partnerships with the lab, research areas, facilities and centers, available on-line technical reports and institutional publications and administrative and management directories.
Grand Junction Office Site	DOE	www.doegjpo.com	Contains news releases, current contract information, links to environmental information resources, site personnel phone directory and Grand Junction site history and mission statement.
Waste Isolation Pilot Plant	DOE	www.wipp.carlsbad.nm.us/wipp.htm	Comprehensive listing of information on WIPP.
Argonne National Laboratory (ANL)	Argonne National Laboratory	www.anl.gov	Web site contains descriptions and programs at Argonne National Laboratory, including news and program publications, technology transfer information, and public interest information. The site also provides links to ANL west and ANL east web sites.
Ames Laboratory	Ames Laboratory	www.ameslab.gov	Overview of Ames Laboratory, including research programs, public and private business opportunities, strategic institutional plans and links to the Ames Laboratory Institute for Physical Research and Technology, Iowa State University, and the DOE.
Fermi National Accelerator Lab	Fermi National Accelerator Lab	www.fnal.gov	General overview of the Fermi Accelerator Lab, including history, mission statement, organizational divisions, an introduction to particle physics, physics resources and links and information on environment, health and safety programs, located under "Divisions and Sections," "Fermi Lab at Work," link from the web site home page.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
Brookhaven National Laboratory	Brookhaven National Laboratory	www.bnl.gov	Contains information on four main areas: Science and Technology (research centers and scientific and research databases), Administration (including standards based management systems used at the Lab, performance measures and a strategic institutional plan), Environment (Brookhaven stewardship policy, environment, safety and health standards, information on the Waste Management and Environmental Restoration Divisions) and General Information (site history, contacts and news releases).
Princeton Plasma Physics Laboratory	Princeton Plasma Physics Laboratory	www.pppl.gov.	Information on site contact persons, news releases, nuclear fusion energy, Laboratory research projects, technology transfer agreements, colloquia and lecture meeting times, education programs and available publications.
Miamisburg Environmental Management Project	DOE	www.doe-md.gov.	Provides general information on the Mound (Miamisburg) site, previous and current site cleanup projects, potential release site packages and response actions, Mound Action Committee news, a Site Transition web page and contact information.
Ashtabula Environmental Management Project	DOE	www.interlaced.net/doeab/.	Provides information on remediation technologies used at Ashtabula site, RMI/DOE partnership, and on-going remediation and decommissioning and related web site links.
Fernald Environmental Management Project	Fernald Environmental Management Project	www.fernald.gov	Contains information on records management, explanation of operable site units, technology programs, site acquisition policies, stakeholder involvement, enhanced work planning programs, publications and site safety procedures.
Rocky Flats Environmental Technology Site	Rocky Flats Environmental Technology Site	www.rfets.gov	Site news and information, fact sheets, public information about the Rocky Flats Environmental Technology Site, Site closure project management plans and cleanup agreements, a public reading room, and links to other web sites, including the Rocky Flats Environmental Data Dynamic Information Exchange web site are located on this web page.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
Idaho National Engineering and Environmental Laboratory (INEEL)	Idaho National Engineering and Environmental Laboratory	www.inel.gov	Information for the following is available: INEEL long-range planning, facilities and fact sheets, engineering and science programs, site cleanup activities, waste treatment storage and disposal and environmental technology development, and national level nuclear materials and technology programs.
Savannah River Operations Office Savannah River Site	DOE	www.srs.gov	This web site outlines the following: Site mission statement, news releases and documents, SRS contractors and tenant organizations, Site sponsored crime watch, Savannah River Operations Office organizational chart, Citizens Advisory Board information, and site specific records released to the public under the Freedom of Information Act .
West Valley Demonstration Project (Westinghouse West Valley Nuclear Services)	Westinghouse West Valley Nuclear Services	www.wv.doe.gov/home.htm	Information on the high level waste vitrification treatment at West Valley, Citizen Task Force, project information and fact sheets, and site procurement policies, history and contact information is available.
Hanford Home Page	DOE	www.hanford.gov/.	Contains general site information, environmental restoration and waste management programs, business opportunities, workshops and advisory board information to promote community involvement in site activities, and an on-line resource center including declassified document retrieval system.
Los Alamos National Laboratory	Los Alamos National Laboratory	www.lanl.gov/	Descriptions of core scientific competency areas, scientific subject areas addressed by the lab, community outreach centers directed by the Lab, Laboratory divisions, programs and offices and institutional strategic plans.
Pantex Plant	Pantex Plant	www.pantex.com	Information on Pantex's site-specific environmental programs, technology transfer opportunities, a document reading room, quarterly environmental monitoring reports, available environmental, safety and health information documents.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
Oak Ridge National Laboratory	Oak Ridge National Laboratory	www.ornl.gov	Information on ORNL history and institutional and strategic plans, major research areas, collaborative research and development opportunities, photo galleries, web site user feedback forms and contact information.
Y-12 Plant at Oak Ridge National Laboratory.	Lockheed Martin Energy Systems	www.y12.doe.gov/	Information on advanced technologies used at the Y-12 Plant and at Oak Ridge, community involvement and outreach programs, business opportunities, Y-12 plant defense programs, stockpile stewardship and management of nuclear weapons material, along with links to the National Prototype Center and Oak Ridge and Y-12 Plant Centers for Manufacturing Technology.
Paducah Gaseous Diffusion Plant	Site Specific Advisory Board for the Paducah Gaseous Diffusion Plant	www.oro.doe.gov/pgdpssab/table.html .	Listing of Paducah Gaseous Diffusion Plant Site Specific Advisory Board links to Advisory Board by-laws, mission statement, membership profiles, site-specific environmental restoration recommendations and general meeting information.
Weldon Spring Site	DOE Office of Environmental Management	www.em.doe.gov/wssrap .	Information on Weldon Spring site stewardship initiatives, integrated safety management and voluntary safety programs, total quality management principles, business partnership and educational opportunities, lessons learned and current environmental remediation activities.
II. (B) Databases			
DOE Environmental Compliance Database	Oak Ridge National Laboratory	http://homer.hsr.ornl.gov/oepa/data/violations	OEPA maintained database of environmental compliance violations at the various DOE offices and facilities.
Oak Ridge Environmental Information System	Oak Ridge Reservation	http://www-oreis.bechteljacobs.org.8080/oreis/help/oreis/home.html	OREIS provides efficient retrievability and long-term (>3 years) retention of Oak Ridge Operations, Portsmouth, and Paducah environmental data.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
The Manifest Information Management System	Idaho National Engineering and Environmental Laboratory	http://mims.inel.gov	The Manifest Information Management System (MIMS) contains information on low-level radioactive waste shipments received at commercial low-level radioactive waste disposal facilities.
The TWRS Technology Database	Richland Operations Office	www.hanford.gov/twrs/tech/tech.htm	Contains publically released documents from across the DOE complex and foreign governments.
III. Other Related DOE Information			
III. (A) Waste Management			
Radioactive Waste Management Complex Investigations Report (Volumes 1-4)	Idaho National Environmental and Engineering Laboratory	http://ar.inel.gov/ar/owa/search_inel_by_date_2	Summarizes key investigations pertinent to site characterization of the Subsurface Disposal Area at the Idaho National Engineering Laboratory Radioactive Waste Management Complex.
Waste Management Progress, A Status Report of Waste Management Activities at Idaho National Engineering and Environmental Laboratory (INEEL)	Idaho National Environmental and Engineering Laboratory	http://ar.inel.gov/ar/owa/getimage_2?F_PAG E=1&F_DOC=15235 &F_REV=00	Discusses the accomplishments, goals, and challenges posed by treating, storing, and disposing of spent nuclear fuel, and other waste streams
Hanford Management Documents	Richland Operations Office	www.hanford.gov/doe/10yrplan/hmd.htm	Contains documents on the waste management process, a Site Treatment Plan Summary, and a Mixed Waste Focus Area Report.
Hanford Waste Information Data System	Richland Operations Office	www.bhi-erc.com/dm/wids/wids.htm	Summarizes the history and status of Hanford waste sites.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
Mound Plant Legacy Waste Management Project	Mound Plant	www.doe-md.gov/legacy/projtemp.htm	Summarizes Legacy Waste Management Project.
Summary Sheet Operable Unit V RI/RA Eastern Area of the Laboratory (Brookhaven National Laboratory)	Brookhaven National Laboratory	www.oer.dir.bnl.gov/ou5-rira.html	Presents an evaluation of the nature and extent of contamination in the Eastern Area of the Laboratory.
Summary Sheet Operable Unit I/VI RI/RA: Southeast Area of the Laboratory (Brookhaven National Laboratory)	Brookhaven National Laboratory	www.oer.dir.bnl.gov/edb-ri.html	Summarizes RI/RA for soil and groundwater contamination in areas of the southeastern portion of BNL.
DOE EM Waste Management Homepage	DOE Office of Environmental Management	www.em.doe.gov/em30	Links to all waste management websites including waste management documents, reports, studies, and databases. Includes information on both international waste management and waste management in the United States.
DOE Energy Pollution Prevention Clearinghouse	DOE	http://epic.er.doe.gov/epic	The U.S. Department of Energy Pollution Prevention Information Clearinghouse, was developed under a joint effort of the U.S. DOE and the U.S. Environmental Protection Agency to enhance the exchange of pollution prevention (P2) information between Federal, state, and local government agencies, as well as with industries, academic institutions and the general public. The system provides access to Federal and state P2 regulations, DOE P2 policy and guidance, special DOE reports and memos, site project summaries, Pollution Prevention Opportunity Assessments (PPOAs), newsletters, P2 contacts, and other periodic reports.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
DOE NEPA Analyses	DOE Office of Environment, Safety and Health	http://tis.eh.doe.gov/nepa/docs/docs.htm	Provides links mostly to EISs and RODs
The Current and Planned Low-Level Waste Disposal Capacity Report	DOE Low Level/Mixed Low Level waste Center of Excellence	www.em.doe.gov/dnfsbrpt/	Provides life cycle volumetric projections of DOE low-level and mixed low-level waste and compares projections to estimates of the current and planned volumetric disposal capacity at DOE disposal facilities.
Office of Waste Management End State Plan, Initial Draft, February 1996	DOE Low Level/Mixed Low Level waste Center of Excellence	www.em.doe.gov/em-30esp/	Defines existing policies and strategies for addressing complex-wide waste storage, treatment, and disposal needs.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
III. (B) Nuclear Materials			
Plutonium: The First 50 Years	DOE Office of Science and Technical Information	http://apollo.osti.gov/html/osti/opennet/document/pu50yrs/pu50y.html	The focus of this report is on the historical plutonium acquisitions and removals that have resulted in the September 30, 1994 plutonium inventory.
Office of Fissile Materials Disposition Homepage	DOE Office of Fissile Materials Deposition	http://twilight.saic.com/md/	Contains information on the disposition of plutonium, HEU, and other fissile materials. Website contains documents with costs, schedules, and inventories.
National Nuclear Data Center	Brookhaven National Laboratory	www.nndc.bnl.gov	Provides information services in the fields of low and medium energy nuclear physics to users in the United States and Canada
III. (C) On Line Libraries			
DOE R&D Project Summaries	DOE	www.doe.gov/rnd/dbhome.html	Access to over 14,000 R&D projects currently ongoing within the DOE can be found within this application.
Environment, Safety and Health Digital Library	DOE Office of Environment, Safety, and Health	http://tis-nt.eh.doe.gov/library/library.html	Provides various tools for finding, using, and analyzing Environment, Safety & Health information
DOE Information Bridge	Department of Energy/Government Printing Office	http://gpo.osti.gov:901dds/entry.html	Provides free, convenient and quick access to full-text DOE research and development reports.
Sandia's Technical Library	Sandia National Laboratories	www.sandia.gov/library.htm	Technical library that has online data on information products and services that support Sandia Research.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
Pantex Plant Electronic Reading Room	Pantex Plant	www.pantex.com.90/topicpdf/docs/index.htm	Provides daily management reports
WIPP Compliance Certification Application (CCA) Library	Carlsbad Field Office	www.wipp.carlsbad.nm.us/library/cca/cca.htm	Library with general information on the WIPP CCA. There is a link to the DOE Application - "October 1996 CCA documents" providing a Table of Contents for the application and appendices.
LLNL Publications	Lawrence Livermore National Laboratory	www.llnl.gov/llnl/001index/08pub-index.html	Publications include Science and Technology Catalog, designed to locate the Laboratory's web pages on Science and Technology Annual Reports.
LANL Library	Los Alamos National Laboratory	http://lib-www.lanl.gov	Provides information resources to the Los Alamos National Laboratory research community. The primary focus is on energy and related topics
III. (D) Transportation			
US DOE Summary of Transportation Activities for FY95&96	DOE National Transportation Program	www.ntp.doe.gov/summary/index.html	Provides an overview of DOE shipment activities for FY95&96.
HAZMAT/RAM Truck Shipments Through New Mexico by Hazard Class and Origin/Destination Pair	DOE National Transportation Program	www.ntp.doe.gov/nmdetai2.html	Provides summary of shipments through New Mexico by Hazard Class and Origin/Destination Pair
HAZMAT/RAM Truck Shipments Through Arizona	DOE National Transportation Program	www.ntp.doe.gov/azdetail.html	Provides summary of shipment through Arizona.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
Haztrak (Information on waste shipments to and from the Nevada Test Site)	DOE Nevada	www.nv.doe.gov/programs/xportmgt/haztrak.asp	Provides information, updated daily, on shipments to and from the Nevada Test Site.
III. (E) Selected Environmental Reports Available On-Line			
Savannah River Site Environmental Report for 1997	Savannah River Site	www.srs.gov/general/srenviro/endrpt/rptall.pdf	Presents information pertaining to environmental activities conducted during CY97.
Pantex Plant 1997 Environmental Report	Pantex Plant	www.pantex.com/aser/index.htm	Summarizes data from the environmental protection and monitoring program at Pantex Plant through December 31, 1997.
1997 Lawrence Livermore National Laboratory (LLNL) Site Annual Environmental Report	Lawrence Livermore National Laboratory	www.llnl.gov/saer/saer97/saer97_home.html	Presents the results of LLNL's environmental monitoring and compliance efforts.
1995 Lawrence Berkeley National Laboratory (LBNL) Site Environmental Report	Lawrence Berkeley National Laboratory	http://ehs.lbl.gov/epg/95ser/sermain.htm	Summarizes environmental site activities at LBNL for CY95.
Grand Junction Office Site Environmental Report for CY 1997	Grand Junction Projects Office	www.doegjpo.com/projects/aser-97/ser.htm	Presents information pertaining to environmental activities conducted during CY97.
Stanford Linear Accelerator Center (SLAC) 1997 Site environmental Report	Stanford Linear Accelerator Center	www.slac.stanford.edu/pubs/slacreports/slacr-525.html	Summarizes environmental site activities at SLAC for CY97.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
Oak Ridge Reservation Annual Site Environmental Report for 1997	Oak Ridge Reservation	www.ornl.gov/Env_Report/asr97/asr.htm	Presents information pertaining to environmental activities conducted during CY97.
IV. Non-DOE Organizations			
IV. (A) General Information			
Department of Transportation (DOT) Homepage	Department of Transportation	www.dot.gov	This website includes information on applicable laws and regulations, general DOT policies and guidance, information technology and guidance, and library resources and publications. Additional consideration is given to business opportunities with the DOT, Y2K initiatives, and key transportation policies and strategic objectives. General information on the Department itself is also provided, along with current news and events.
Environmental Protection Agency Homepage	Environmental Protection Agency	www.epa.gov	EPA Home Page
Federal Railroad Administration (FRA) Homepage	Federal Railroad Administration	www.fra.dot.gov	Contains information on applicable regulations, research and development, business opportunities with the FRA, a personnel information directory, search engine and a web link to FRA's Freedom of Information Act web site, along with the FOIA web sites for the Department of Justice and Department of Transportation.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
Nuclear Regulatory Commission Homepage	Nuclear Regulatory Commission	www.nrc.gov	Information is contained on nuclear reactors, strategic planning on radioactive waste management, analyses and evaluations of operational reactor performance and nuclear reactor licensing, operations and inspections procedures and NRC strategic planning on nuclear materials. Additional descriptions of radiation protection and emergency response programs, NRC planning and financial management, and news and information updates are provided.
Envirolink, The On Line Environmental Community	Envirolink	www.envirolink.org	Includes current environmental news, local opportunities for activism, One World Magazine, and forums to discuss environmental issues.
Environmental Background Information Center	Envirolink	www.envirolink.org/orgs/ebic	A non-profit organization that provides corporate research and strategic assistance to members of the public who are interested in getting involved in local environmental issues.
Right-to-Know Network-Environmental Databases	Right-to-Know Network	http://ombwatch.org/rtnet/rtkdata.html	Provides links to the following environmental databases: TRI, BRS, CERCLIS, DOCKET, ERNS, RCRIS, TSCATS, ARIP, FINDS, and PCS.
IV. (B) Specific Information			
IV. (B)(1) Waste Management			
RADWASTE.ORG	Wastelink	www.radwaste.org	Information is contained on this website about radioactive waste processing, storage, disposal, handling, characterization and transport, along with additional facts related to waste management facility decommissioning

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
“Clu-In” Hazardous waste Cleanup Information	EPA Technology Innovation Office	www.clu-in.org	Provides information about innovative treatment technologies to the hazardous waste remediation community. Describes programs, organizations, publications and other tools for federal and state personnel, consulting engineers, technology developers and vendors, remediation contractors, researchers, community groups and individual citizens. The site was developed for the US EPA but is intended as forum for all waste remediation stakeholders.
Maricopa Environmental Monitoring Site: Monitoring Systems for LLW Disposal Sites and Sites Designated Under the Site Decommissioning Plan	University of Arizona	http://ag.arizona.edu/NRC/nrc.html	Contains links to University of Arizona, National Laboratories, General Links, executive summary of the project, project team members and the current status of monitoring systems for LLW disposal sites and sites designated under the Site Decommissioning Plan.
Federal Railroad Administration, Hazardous Materials Division Home Page	Federal Railroad Administration	www.fra.dot.gov/o/safety/hazmat/index.htm	Contains information on approving requirements for non-conforming waste packages, FRA High Level Nuclear Waste Rail Transportation Policy, regulatory updates for the transportation of hazardous materials by rail, requirements for ensuring tank car safety and weld quality standards for tank car construction.
Federal Railroad Administration, Hazardous Materials Division, High Level Waste Rail Transport Policy	Federal Railroad Administration	www.fra.dot.gov/o/safety/hazmat/hlwwaste.htm	Information on FRA requirements for the transport of HLW by rail.

Appendix C - List of Web Sites to be Linked to the Central Internet Database

Web Site Name	Owner	URL	Description
IV. (B)(2) On-Line Libraries & Databases			
Superfund Search	EPA	www.epa.gov/superfund/search/index.htm	Contains general information on Superfund, programs, accomplishments (such as the number of project completions, environmental indicators and cleanup figures), regional jurisdictions and on-line assistance to grants, training, databases and software. Provides a search engine to assist queries.
Environmental Legislation	Colgate University	http://classes.colgate.edu/core114/legislation	Web site dedicated to tracking environmental legislation that is pending approval in the 105 th Congress. Focus is on those bills, which if passed, would be beneficial to the environment.
Superfund Hazardous Waste Site Advanced Query Form	EPA	www.epa.gov/superfund/sites/	Provides basic and advanced query capabilities to retrieve superfund site information on: site narratives and fact sheets, geographic information, site assessment, Records of Decision (RODS) for site cleanup, and cleanup action, and contaminants of concern. Also provides detailed information on the National Priorities List Sites in the U.S, and CERCLIS information on hazardous waste sites, site inspections, preliminary assessments, and remediation of hazardous waste sites.

Release 3 Addendum

Analysis of Baselined Requirements

I REQUIREMENTS BASELINED PRIOR TO THE START OF SYSTEM DEVELOPMENT

Table 1A: CID Input Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
IN-001	Sources of data to the CID will be: EM Corporate Database Facilities Information Management System (FIMS) Materials in Inventory Database (MIN) Pollution Prevention Database Toxic Release Inventory (TRI) Buried TRU Database The portions of each database used for the CID will contain information that is relevant to the information requested in the PEIS Settlement Agreement.	R	Y	Buried TRU data is not available in CID Release 3, but it is planned to be incorporated in the next update of the CID.
IN-002	Data included in the CID will be information that is collected, or planned to be collected in the future by DOE at a national level.	M	Y	None.
IN-003	DOE Field/Operations Offices will not be required to provide any additional data beyond that which is currently provided by existing source databases.	R	Y	None.

Table 1A: CID Input Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
IN-004	Waste and contaminated media information from the DP, SC, and NE Programs will be provided to the CID through the EM Corporate Database (this is currently a proposal that has not yet been decided. See Section 6 - Assumptions and Issues).	O	Y	The EM Corporate Database contains some data for DP, SC, and NE. However, it is unclear if the data are complete. The DOE Project Manager is consulting the EM, DP, SC, and NE Programs to determine if these data sets are complete. In addition, the project team will review the next EM Corporate Database update to the CID to assess whether these data are complete.
IN-005	Whenever possible, the CID will be populated electronically through programs that will migrate the selected data items from the source data systems. If electronic migration is not possible, the CID will be populated through data entry directly into the CID tables.	R	Y	None.
IN-006	Updates to the CID from each data source will occur at least annually.	M	Y	Update schedule to be determined.
IN-007	Each update to the CID will provide a new set of records to the database to supplement the existing CID data. No data in the CID will be overwritten by subsequent updates.	R	N	This feature was not included in CID Release 3 since there is currently only one set of data. This requirement will be fulfilled in the upcoming FY 2000 CID update.
IN-008	The EM Corporate Database will be the source of radioactive waste and contaminated media data, and SNF. Non-radioactive hazardous waste information will not be imported from the EM Corporate Database.	R	Y	None.

Table 1A: CID Input Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
IN-009	The FIMS Database will be the source for contaminated facilities data for all required DOE programs.	R	Y	None.
IN-010	The MIN Database will provide data on excess fissile materials in inventory and other MIN categories for the 1996 reporting year only. The SNF inventories from MIN will not be migrated to the CID.	R	N	SNF records have been migrated from MIN and there is no issue regarding these records.
IN-011	The Pollution Prevention Database will only provide data on non-radioactive hazardous waste.	R	Y	None.
IN-012	DOE's Toxic Release Inventory (TRI) Database will provide data on sites reporting through EPA's TRI program on Toxic Chemical Releases. The TRI information included in the CID will be from Part I, Section 4, and Part II, Sections 1, 5, 6, and 8 of EPA's reporting Form R.	R	Y	None.
IN-013	The Buried TRU Database will provide data on sites that are currently managing buried TRU waste.	R	N	Buried TRU data is not available in CID Release 3, but it is planned to be incorporated in the next update of the CID.
IN-014	For each category of information specified in the PEIS Settlement Agreement, the level and degree of detail of the data stored in the CID will vary, depending on the level and degree of detail of the data currently available and collected by DOE on an on-going basis.	M	Y	None.

Table 1A: CID Input Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
IN-015	No information that is classified, unclassified controlled nuclear information (UCNI), operational security (OPSEC), or official use only (OUO) will be included in the CID.	M	Y	None.
IN-016	Waste and facilities managed through the Naval Nuclear Propulsion Program are not required to be included in the CID.	M	Y	None.
IN-017	Commercial reactor spent nuclear fuel data will not be included in the CID.	M	Y	None.
IN-018	There will be a data validation process to allow system owners 15 business days to review and validate data migrated to the CID prior to that data being released.	R	Y	Data have been reviewed and approved.
IN-019	During each migration, an automated process should detect structural changes in a source database prior to executing the migration program.	O	Y	None.
IN-020	The time and date of the last update of each record will be maintained in the CID database.	R	N	The CID maintains this information on a dataset-by-dataset basis.

Table 2A: CID Output Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
OUT-001	Outputs from the CID will be in the form of Summary Reports, Standard Reports, and User-Defined Reports.	R	Y	Summary reports can be found under the title "Ready-to-read."
OUT-002	Based on written requests from the user community, a DOE point-of-contact will be responsible for producing hard copy reports from the CID and making these reports available to those organizations and individuals who do not have computer access to the CID.	M	Y	Hard copy reports can be obtained by contacting: CID Support Desk at cidsupport@ppc.com or 703-748-7085 Jim Werner (CID POC) at James.Werner@em.doe.gov or 202-586-9280 Matt Zenkovich at Mathew.Zenkovich@em.doe.gov or 202-586-4612
OUT-003	The system will provide five to ten Summary Reports. These reports will be pre-generated from the CID and available only in PDF.	R	Y	12 summary reports are available in CID Release 3. The Comprehensive Site Profile reports are available through the ready-to-read report list AND the interactive United States Map on the home page.
OUT-004	The system will have the ability to generate 20 to 30 Standard Reports. These reports will be available in PDF, HTML, and comma-delimited formats.	R	Y	64 standard reports are available in CID Release 3.
OUT-005	The system will support the generation of an unlimited number of User-Defined Reports. The output of user defined reports will be available in PDF, HTML, and comma-delimited formats.	R	Y	None.

Table 2A: CID Output Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
OUT-006	The system will provide a process by which a user can obtain a complete copy of the CID structure and contents.	O	Partially	The contents of the CID are available on the website through the “Data Dictionary” link. The structure of the CID (the data model) is available by contacting the CID Support Desk.
OUT-007	The system will provide an audit feature to track the number of times each Standard and Summary Report is executed.	R	Y	The CID Project Team is tracking statistics about hits on the CID Website.
OUT-008	The system will provide an audit feature to track the number of times specific data sets and data elements are selected when constructing user-defined reports.	O	Y	The CID Project Team is tracking statistics about hits on the CID Website.
OUT-009	The system will contain a function that tracks the number of users that access the site.	R	Y	The CID Project Team is tracking statistics about hits on the CID Website.

Table 3A: CID Data Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
DAT-001	The database will categorize waste and contaminated media by waste type (i.e., high-level waste, transuranic waste, low-level waste, and mixed low-level waste).	M	Y	None.
DAT-002	For contaminated facilities, the database will identify the facilities (name and location), and describe their use and status (operating or standby) and size (approximate square footage).	M	Y	None.
DAT-003	For each waste type, DOE will provide the location of site/radioactive material, i.e., the name of the DOE site (e.g., the Savannah River Site (SRS), the Pantex Plant (Pantex), the Idaho National Engineering and Environmental Laboratory (INEEL)) where the radioactive material is generated, stored, treated, or disposed.	M	Y	None.
DAT-004	For waste, DOE will categorize by waste type (i.e., high-level waste, transuranic waste, low-level waste, and mixed low-level waste) and provide information about the annual volumes (beginning with 1998), and the future projected volumes, of waste in storage, newly generated, treated, and disposed.	M	Y	Newly generated quantities are reported as “addition quantities.”
DAT-005	For contaminated environmental media, DOE will provide the estimated volume of the media.	M	Y	None.

Table 3A: CID Data Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
DAT-006	For spent nuclear fuel, the database will provide the mass of spent nuclear fuel in storage and annual new receipts.	M	Y	None.
DAT-007	For contaminated facilities, the database will provide the approximate square footage of the facility, and identify whether any contamination is radioactive, chemical, or both.	M	Y	None.
DAT-008	For waste and contaminated environmental media, the database will identify the major chemical constituents of concern from a regulatory or programmatic perspective.	M	Y	None.
DAT-009	For waste, contaminated environmental media, and spent nuclear fuel, the database will identify the major radionuclides of concern from a regulatory or programmatic perspective and provide the total estimated curie content.	M	Y	None.
DAT-010	For each waste type, the database will provide information about the waste disposition path in terms of storage, treatment, and disposal, including site locations, to the extent that such information is collected by DOE. For waste transfers between DOE sites or to commercial facilities, the database will identify the shipping and receiving sites, and the annual volume of transferred waste (by waste type).	M	Y	None.

Table 3A: CID Data Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
DAT-011	The database will provide information about the generator of waste, contaminated media, or spent nuclear fuel, by the DOE site (e.g., SRS, Pantex, INEEL) and the major program (i.e., the DOE EM, DP, SC, and NE Offices) that is responsible for its generation, to the extent such information is collected by DOE.	M	Y	None.
DAT-012	The database will minimize the use of codes from the source systems and will use proper names in place of codes, where practical.	R	Y	For the definition of a code or acronym look for footnotes and/or in the glossary.
DAT-013	The database will include separate tables or “views” of data, where practical, to facilitate production of Summary and Standard Reports when information requires a cross section of data from different tables in the database.	O	Y	None.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
Overall Structure				
FUNC-001	<p>The interface will include the following components:</p> <ul style="list-style-type: none"> Home Page “What’s New” page “Overview” Page “Web Site Map” Page “Links” Page “Feedback” Page “Getting Started” Page “Glossary” Page “User Help” Page “Report Builder” Page “Summary Reports” Page “Standard Reports” Page “User-Defined Reports” Page 	R	Y	<p>The “Links” page has been developed as the “Related Links” page.</p> <p>The functionality for the “Report Builder” page has been built into the homepage and through the “Report Generation” link, where the user can select the three report types (ready-to-read, standard, or user-defined).</p>
FUNC-002	<p>Every screen will have a menu bar which will present the user with the following options:</p> <ul style="list-style-type: none"> “What’s New” Page “Overview” Page “Web Site Map” Page “Links” Page “Feedback” Page “Getting Started” Page “Report Builder” Page 	R	Y	<p>In addition to these seven options, there is also a link to “Contacts” on every page.</p>

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-003	Every screen will have a link to the “Glossary” and the “User Help” feature for user reference throughout the system. The system will separate the “Glossary” feature and a “User Help” feature to distinguish them.	R	Y	<p>The “User Help” page has been developed as the “Help” page.</p> <p>In addition to the glossary and help, there is also a link to the “Search” feature, the “Data Dictionary,” and the CID “Home” page on every page.</p>
FUNC-004	The system will make minimal use of graphics and provide users guidance on turning off graphics to enhance performance of slower machines.	R	N	There is currently no option to view the CID website without graphics. However, CID Release 3 has been developed with minimal graphics in response to comments from stakeholders that the system must accommodate low-end computers and software.
“What’s New” Page				
FUNC-005	<p>On the “What’s New” Page, the system will have a welcome message, quick facts about the web site, and current events related to the PEIS Settlement Agreement. This page will serve as the home page for the web site and inform the user about the following:</p> <ul style="list-style-type: none"> Features recently added to the web site The exact date and time of the last data migration for each source (i.e., “These data are current as of day/month/year”) The reporting periods covered by the migrated data, listed by source 	R	Partially	<p>CID Release 3 provides a list of recently added features, the date of the last migration for each data source, and the reporting periods covered by the migrated data.</p> <p>CID Release 3 does not provide current events related to the PEIS Settlement Agreement.</p> <p>The What’s New page is not the CID homepage. The project team decided to use the home page as the jumping off place to get directly to the reports.</p>

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-006	As appropriate, the interface will include an icon of the United States that will allow the user to access a screen to select a state or site of interest for report generation. (See Standard Reports section)	O	Y	The United States map offers access to the site profile reports.
FUNC-007	The system will include a feature that will execute a key word search of the web site contents.	O	Y	None.
“Overview” Page				
FUNC-008	The system will have an “Overview” section that will present the user with background information on the PEIS Settlement Agreement and the EM Program and other background information that will help users understand the data available on the web site.	R	Y	None.
“Web Site Map” Page				
FUNC-009	The system will contain a “Web Site Map” listing all functional areas of the site displayed in a hierarchical format. The map will contain a link to each web site section.	R	Y	None.
“Links” Page				
FUNC-010	For the purpose of enhancing the usefulness of the CID, DOE will provide links to other DOE site-specific databases (these may include certain facility-specific or program-specific information).	M	Y	None.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-011	The system will provide links to other non-DOE web sites and databases that would supplement the information contained in the CID or provide other useful information on related topics, organizations, and hazardous waste.	R	Y	None.
FUNC-012	<p>Web site links will be organized by the following categories:</p> <p><u>DOE</u></p> <ul style="list-style-type: none"> Site-Specific Databases Headquarters Databases On-Line Libraries Waste Management Information - Site Specific Waste Management Information - Headquarters Environmental Reports Nuclear Material Information <p><u>Non-DOE</u></p> <ul style="list-style-type: none"> Transportation Information EPA Information Links to Plaintiff Web Sites (where available) Other relevant sites (to be determined) <p>A current list of available links is included in Appendix C.</p>	R	Y	None.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-013	The list of available links will provide the name, owner, URL, and brief description of the site.	R	Y	The URL is not provided, but the link goes directly to the correct URL.
FUNC-014	The “Links” page will include a disclaimer about the content of all non-DOE web pages.	R	Y	None.
“Feedback” Page				
FUNC-015	The system will contain a “Feedback” feature that will enable users to ask questions about the content of the site, its functionality, its presentation, and provide additional comments. The feedback feature will also enable users to provide additional comments, and the feedback will be sent directly to a DOE representative via e-mail.	O	Y	None.
FUNC-016	The “Feedback” feature will have the capability to track questions and responses on reports, as they arise.	O	Y	None.
“Getting Started” Page				
FUNC-017	The system will provide a “Getting Started” feature, which will provide the user with a quick reference guide on how to use the web site.	R	Y	None.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
“Glossary” Page				
FUNC-018	<p>At a minimum, the Glossary will have the following features:</p> <ul style="list-style-type: none"> A list of definitions of all of the terms used in the database and application An explanation of waste types (e.g., low-level waste (LLW), mixed low-level waste (MLLW)) An explanation of other waste types (e.g., spent nuclear fuel (SNF), contaminated facilities, material in inventory (MIN)) A list of acronyms An explanation of the different management activities (e.g., generated, treated, stored) An explanation of different units of measure for radionuclides and hazardous chemicals (e.g., mass, volume, radioactivity) and conversion tables, where appropriate 	R	Y	<p>Acronyms are defined, but there is no “official” list of acronyms.</p> <p>There are no conversion tables since the reports display data in the same units (except where noted).</p>
FUNC-019	Glossary terms will be listed in alphabetical order on the screen. The Glossary will be “searchable” to access the desired definition(s).	O	Y	None.
FUNC-020	The “Glossary” will be accessed through a new browser window so users can run this feature without interrupting their current operations.	R	Y	None.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
“User Help” Page				
FUNC-021	<p>The system will have a “User Help” function that will present the following options:</p> <p>An <u>Index</u> of available help topics. The user will be able to access this feature from any screen on the web site.</p> <p>The <u>Technical Support</u> option will have contact information for users that need assistance operating the system. It will provide information for contacting support staff for technical or operational assistance with using the CID (e.g., phone numbers and e-mail addresses).</p> <p>The <u>Data Dictionary</u> option will provide an explanation for all the data elements in the CID. The data dictionary will be accessible from all screens where it may be necessary to define data elements (e.g., user-defined reports, filtering standard reports).</p>	R	Y	<p>Technical support can be accessed through the “feedback” page, the “Contacts” page, and by contacting the CID Support Desk directly. These features have been developed separately from the “User Help” feature.</p> <p>The data dictionary can be accessed through the “Data Dictionary” link. The data dictionary has been developed separately from the “User Help” feature.</p>
FUNC-022	The “User Help” function will also contain context-sensitive functionality.	O	Y	None.
FUNC-023	The “User Help” will be displayed in a separate browser window so users can run this feature without interrupting their current operation.	R	Y	None.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
“Report Builder” Page				
FUNC-024	<p>The system will have a main report page. There will be three types of reports available to the user on a main report page:</p> <p style="text-align: center;">Summary Reports Standard Reports User-Defined Reports</p> <p>Each option will be accompanied by a description that adequately describes the category of report.</p>	R	Y	<p>This functionality has been built into the homepage and through the “Report Generation” link, where the user can select the three report types (ready-to-read, standard, or user-defined).</p> <p>Descriptions of each report type are not provided with the selection options, but do appear in multiple places throughout the website, including the Overview, Getting Started, and the Glossary.</p>
FUNC-025	<p>The system will enable the user to choose an output format for standard and user-defined reports after the criteria for the report has been established. The output format screen will be the last screen presented to the user before the results of a report are displayed. The possible formats for output will include:</p> <p style="text-align: center;">Hypertext Markup Language (HTML) Portable Document Format (PDF) Comma delimited file (importable to spreadsheet applications)</p>	R	Y	<p>CID Release 3 offers two output options for standard reports: PDF and spreadsheet, and two options for user-defined reports: HTML and Comma Delimited (Comma Separated Values (CSV)).</p> <p>HTML format is not possible for standard reports given the complex and dynamic formatting required for these reports.</p>
FUNC-026	The user will be able to print one, multiple, or all pages of a report.	O	Y	Select which pages to print in the print feature on your computer.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
“Summary Reports” Page				
FUNC-027	The system will present a list of available Summary Reports in a menu format. Each Summary Report will be accompanied by a description of its data content and presentation format.	R	Y	None.
FUNC-028	The system will not allow the user to modify the data in any Summary Report.	R	Y	Summary report outputs are in PDF format and are uneditable.
“Standard Reports” Page				
FUNC-029	Through selecting a map icon, a larger map will appear and prompt the user to choose a specific state. Once a state has been selected, the system will provide a detailed state map that includes all of the DOE sites within that state and will allow the user to run either a “state-specific” or “site-specific” Standard Report.	O	N	<p>CID Release 3 does not contain the site map functionality. The site maps were originally part of the CID, however they were removed for two reasons:</p> <p>The maps were scanned in from maps that already existed. The quality of the scanned images was not clear enough, and the maps would have to be re-created to be useful on the CID.</p> <p>The existing maps contained out-dated information including old/invalid sites and old site names.</p>

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-030	<p>The Standard Reports option will include “profile” reports that provide complete information on the profile topic. For example, the site profile will contain information from all data sources for the chosen site(s) (e.g., waste data, contaminated facilities, materials in inventory data, toxic release inventory data, pollution prevention data, spent fuel data). The categories of Standard (or Profile) Reports that may be appropriate include:</p> <p>Site Profile - provides all data on selected site(s) Data Category Profile - provides all data on a selected category (e.g., contaminated facilities, radioactive waste, spent nuclear fuel) Program Profile - provides all data for selected DOE programs (e.g., EM, DP, SC, NE) Operations Office Profile - provides all data for selected DOE Field/Operations Offices Yearly Profile - provides all data for a specified year State Profile - provides all data for a specified state</p>	R	Y	Profile reports are located under the Summary Reports option.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-031	<p>The filtering capabilities for Standard Reports that may be appropriate include:</p> <p>Standard Report Title (user may select only one)</p> <p>Site (e.g., Pantex Plant, Hanford, Savannah River - user may select one, multiple, or all sites)</p> <p>Data Category (e.g., materials in inventory, radioactive waste, contaminated facilities - user may select one, multiple, or all data sources)</p> <p>Program (user may select one, multiple, or all programs)</p> <p>Operations Office (user may select one, multiple, or all Operations Offices)</p> <p>Year (user may select one, multiple, or all years)</p> <p>State (user may select one, multiple, or all states)</p>	R	Y	In addition to these filters, some reports also enable users to filter on physical form, generating program, activity, and other criteria when appropriate.
FUNC-032	The system will notify the user if no data matches the Standard Report they designed.	R	Y	None.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
“User Defined Reports” Page				
FUNC-033	<p>The system will provide a User-Defined Report option that will include a number of steps to construct a custom query and report:</p> <ul style="list-style-type: none"> Data category selection Column selection Data criteria selection Sort criteria Data aggregation Output customization 	R	Y	None.
FUNC-034	After the user has completed a step, the system will present the option of returning to a previously completed step to make changes to the criteria.	R	Y	None.
FUNC-035	The system will provide a library of pre-created queries for other users to access.	O	N	This functionality was contemplated by the project team. Ultimately, it was decided that the idea was not feasible. Instead, CID Release 3 lists all selection criteria chosen on the report output, so that the report can be re-created.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-036	<p>The “<u>data category selection</u>” screen will include the following data categories:</p> <p>Materials in inventory (MIN Database) Contaminated facilities (FIMS Database) Non-radioactive hazardous waste (Waste Generation Report) Toxic release inventory (TRI database) Radioactive waste (EM Corporate Database) Contaminated Media (EM Corporate Database) Buried transuranic waste (Buried TRU Database) Cross-sections of source data, as appropriate (to be further defined in functional design document)</p> <p>The user will be allowed to choose only one data category.</p>	R	Y	Buried TRU data is not available in CID Release 3, but it is planned to be incorporated in the next update of the CID.
FUNC-037	<p>After the user has selected a data category, the “<u>column selection</u>” screen will be enabled. The system will present only the columns (i.e., data elements) that correspond to the data set that was selected in the previous screen. The system will allow the user to select those columns to be included in the User-Defined Report.</p>	R	Y	None.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-038	<p>Within each data category, the data element that is used to identify the main record for the data source will automatically be selected as a column in the “<u>column selection</u>” screen. The following is a list of the identifying data elements, by source:</p> <p>MIN Database: Material ID FIMS Database: Property Sequence Number Waste Generation Report: Site ID TRI Database: Facility Name EM Corporate Database: Waste Stream Code Buried TRU Database: Site Name</p> <p>The system will give the user the option of de-selecting this column but will be advised that results may be difficult to interpret if this identifying element is not included in the final report.</p>	O	N	<p>The identifying elements could not be implemented in the User Defined Section of the CID. Several issues arose when analyzing this requirement where upon further review, having these data elements automatically selected would restrict the user defined features and limit the user’s ability to build ad hoc queries.</p> <p>In place of this requirement, we highlighted fields that were important elements to include in many queries, and encouraged users to read the data dictionary entries for more guidance.</p> <p>In addition, we are implementing a quick reference sheet for users to consult when developing ad hoc queries.</p>
FUNC-039	The user will have the option of determining the order in which the columns will appear on the report. The system will produce a report with data elements in the order they were selected if the user does not provide order numbers.	R	Y	None.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-040	The system will provide a warning when a user exceeds a certain number of columns (to prevent poor format and readability).	R	N	System does not offer a warning for an excessive number of columns. However, the system does warn the user when the report output exceeds 1000 records.
FUNC-041	<p>Once the user has selected the columns that will be in the final report, the system will present the “<u>data criteria selection</u>” screen. This screen will include the columns the user has selected and will allow the user to define the following parameters:</p> <p>For columns that contain text or alphanumeric options from a list of valid values, the user will choose (from a pull down menu) the specific values to be used in the report. The user will have the option of selecting one or multiple entries.</p> <p>For numerical data, the user will have the option of filtering data based on a value and operator to designate less than (<), equal to (=), or greater than (>).</p>	R	Y	The “condition” on filter criteria is offered based on what is appropriate for the selected data elements.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-042	After the user has selected the data criteria to be included in the report, the “ <u>sort criteria</u> ” screen will be enabled. This screen will include options for choosing up to five sorting levels. The sorting levels will be presented to the user as pull down menus, where the columns selected in the “column selection” screen will appear. Each sorting level will allow the user to choose between sorting the data in ascending or descending order.	R	Y	None.
FUNC-043	If a numeric value is selected as a “column” and it has a corresponding “units” field in the data table, the “units” field will automatically be selected to accompany the value on the output.	R	N	In CID Release 3, units must be selected for them to appear in the report output. This requirements is being analyzed for possible incorporation in future releases of the CID.
FUNC-044	<p>After the user has defined how the report will be sorted, the “<u>data aggregation</u>” screen will be enabled. This screen will include options to allow the user to choose:</p> <p>Columns that were selected that they wish to be reported as an aggregate value (e.g., sum total). Whether those fields will be aggregated as record counts, sum totals, or both Whether report should include detailed records or summaries</p>	R	Y	<p>This functionality has been incorporated differently. The totals option is determined on the “Report Layout” (step 2) screen be selecting: no totals, line items with report totals, summarize line items into totals.</p> <p>Detailed or summary records is determined on the “Select Columns” (step 3) screen. The detailed and summary columns are separate options.</p>

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-045	The type of data in a field will dictate if the system can perform a sum total or a count. Only numerical data will be summed. Record counts for non-numeric data will be available, where appropriate.	R	Y	None.
FUNC-046	The “ <u>data aggregation</u> ” screen will include an option for the user to select whether detailed records, aggregate data , or both detailed <i>and</i> aggregate data will appear on the output.	R	Y	This functionality has been incorporated differently. Detailed or summary records is determined on the “Select Columns” (step 3) screen. The detailed and summary columns are separate options.
FUNC-047	Following the “ <u>data aggregation</u> ” screen, the user will be allowed to “ <u>customize the output</u> ” of the report. This screen will include options for the user to name the report; choose the format of the report (i.e., HTML, PDF, comma-delimited).	R	Y	In addition to these options, the user can also choose format options (borders and filed wrapping) and page format options (page orientation: portrait or landscape, page size: letter or legal, and font style.
FUNC-048	The system will notify the user if no information matches the report they designed.	R	Y	None.
FUNC-049	The output will include printed information on the selection criteria chosen by the user to generate the report.	O	Y	None.
FUNC-050	The system will allow the user to select a font type and choose to print landscape or portrait.	O	Y	None.

Table 4A: CID Functional Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
FUNC-051	The system will include the ability to display information obtained from a User-Defined Report as a graph or chart (e.g., pie chart, histograms, or line graphs). (For further discussion, see Section 6 - Assumptions & Issues)	O	N	CID Release 3 does not include this functionality. The CID has been developed with a limited amount of graphics in response to comments from stakeholders that the system must accommodate low-end computers and software.

Table 5A: CID Technical Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
TECH-001	The minimal components for the client workstation are: Internet connection (14.4 kbps modem or faster) Netscape Navigator Version 3.0 or later, Microsoft Internet Explorer Version 3.0 or later Monitor set to 256 colors JavaScript enabled	R	Y	None.
TECH-002	The system will be accessible 24 hours a day, 7 days a week, except for scheduled maintenance and upgrades.	R	Y	None.
TECH-003	The system will be operable without requiring the use of software plug-ins on the client workstation.	R	Y	Standard reports are most easily viewed in the Portable Document Format (PDF). There is a direct link to a free downloadable version of Adobe Acrobat Reader for users who do not already have it installed on their computers.
TECH-004	The database will be designed to provide read-only access to all users.	R	Y	None.
TECH-005	The browser and software will support the use of "cookies."	R	Y	None.
TECH-006	The browser will support the use of frames.	R	Y	None.

Table 5A: CID Technical Requirements				
Req. Number	Requirement Statement	Category	In CID Release 3	Comment
TECH-007	The CID server configuration and operating procedures will not preclude implementation of required EM security measures for web hardware and software.	R	Y	None.
TECH-008	The system will be designed to operate with a monitor resolution of 800 x 600 pixels.	R	Y	The system operates with other monitor settings, but it has been designed to operated optimally with 800x600 resolution.
TECH-009	The system will be designed to meet all applicable regulations and policies governing web site design for the disabled, and will provide an appropriate level of accessibility to users with disabilities.	O	N	The CID development team has reviewed the requirements for implementing a system that is accessible to users with disabilities. Given the time frame for the first deployment of the CID, these requirements were not incorporated. However, these requirements will be analyzed for possible incorporation in future versions of the CID.
TECH-010	The system will accommodate 150 users concurrently.	O	Y	None.
TECH-011	Technical and user support staff will be available to CID users by phone during east coast business hours for the first three months of CID operations.	R	Y	Users may contact the CID Support Desk via email at cidsupport@ppc.com or by calling 703-748-7085.
TECH-012	User support after three months of CID operations will consist of e-mail and voice mail communications. Replies to requests received through e-mail or voice mail will occur within 24 business hours of receipt of message.	R	Y	None

II REQUIREMENTS BASELINED DURING SYSTEM DEVELOPMENT

Req. Number	Requirement Statement	In CID Release 3	Comment
OUT-013	<p>Add a link from the CID that includes the 1999 stream disposition maps. Add the link under the section:</p> <p>I. (B) Headquarters Databases</p> <p>Title:</p> <p>July 1999 Detailed Disposition Maps</p> <p>Description:</p> <p>Contains detailed Disposition Maps for each Operations Office based on the July 1999 Stream Disposition Data. Please note that the Central Internet Database is populated with the December 1999 Stream Disposition Data, so there may be minor differences between these maps and the information currently found in the CID. However, these differences should not be significant.</p> <p>Link:</p> <p>http://emi-web.inel.gov/dmaps.html</p>	Y	Replaced link to the old disposition maps.

Release 3 Addendum - Analysis of Baselined Requirements

Req. Number	Requirement Statement	In CID Release 3	Comment
OUT-014	Add a Data Source footnote to the summary reports to be consistent with Jim's request for standard reports. This is applicable to reports SUM-1 through SUM-7 where EM Corporate database is the source. The other summary reports are multiple sources.	Y	None.
FUNC-052	Accommodate multiple levels of expertise for pulling Standard Reports	N	Not yet implemented. There is currently only one way to generate each Standard Report. Experienced users are not able to skip steps to facilitate quicker access to reports.
FUNC-071	Modify data dictionary so that it presents Field Names alphabetically and remove the table names.	Y	None.
FUNC-075	Selection criteria should enable users to select a state or an Operations Office.	Y	Related to FUNC-031 in <i>Section I. Requirements Baseline Prior to the Start of System Development</i> .
FUNC-079	The Selection Screen for Physical Form should enable the user to choose only 1 MPC Code OR only 1 option from the alternate list to include/exclude Groundwater/Wastewater or all physical forms. If the user picks a particular MPC, that name should appear on the report header. If the user chooses from the Alternate list, that name (e.g. Groundwater/Wastewater Only) should appear on the report header.	Y	Related to FUNC-031 in <i>Section I. Requirements Baselined Prior to the Start of System Development</i> .
FUNC-080	Selection criteria should enable users to select only a State OR an Operations Office exclusively. (Users cannot select both a State and an Operations Office.)	Y	Addendum to FUNC-075 in <i>Section II. Requirements Baselined During System Development</i> .

Release 3 Addendum - Analysis of Baselined Requirements

Req. Number	Requirement Statement	In CID Release 3	Comment
FUNC-084	Allow the user to select multiple states or operations offices for a standard report from the state/operations office selection screen.	Y	Addendum to FUNC-075 and FUNC-080 in <i>Section II. Requirements Baselined During System Development</i> and FUNC-031 in <i>Section I. Requirements Baseline Prior to the Start of System Development</i> .
FUNC-085	Add a new screen to accept user input to 'order' columns in the User-Defined reports.	Y	Addendum to FUNC-033 in <i>Section I. Requirements Baseline Prior to the Start of System Development</i> .
FUNC-102	In "Related Links," remove the link to the Office of Waste Management End State Plan, Initial Draft, February 1996. This is under item III(A) Other Related DOE Information, Waste Management.	Y	None.

Req. Number	Requirement Statement	In CID Release 3	Comment
FUNC-104	RAD waste/contaminated media data is rounded to three significant digits to the right of the decimal. SNF data is rounded to four significant digits to the right of the decimal. For RAD waste/contaminated media reports that show quantities at the stream level (i.e. RAD-1, CM-1, RAD/CM-1), quantities that are less than .0005 are shown as "T000." A footnote at the bottom of these reports explains that "T000" amounts are trace quantities. For SNF reports that show quantities at the stream level (i.e. SNF-1), quantities that are less than .00005 are shown as "T000" with a footnote on the report explaining that these are trace amounts. For all other SNF and RAD/CM reports, any amounts that are less than .0005 or .00005 (for SNF) show as zero, but a footnote at the bottom of all reports reads, "Data is rounded to three (four for SNF) significant digits to the right of the decimal. Any quantities reported below this level will appear as "zero" on the report."	Y	None.
FUNC-150	Develop report output previews for all Standard Reports. Make the previews accessible to users on the report selection screens.	Y	None.